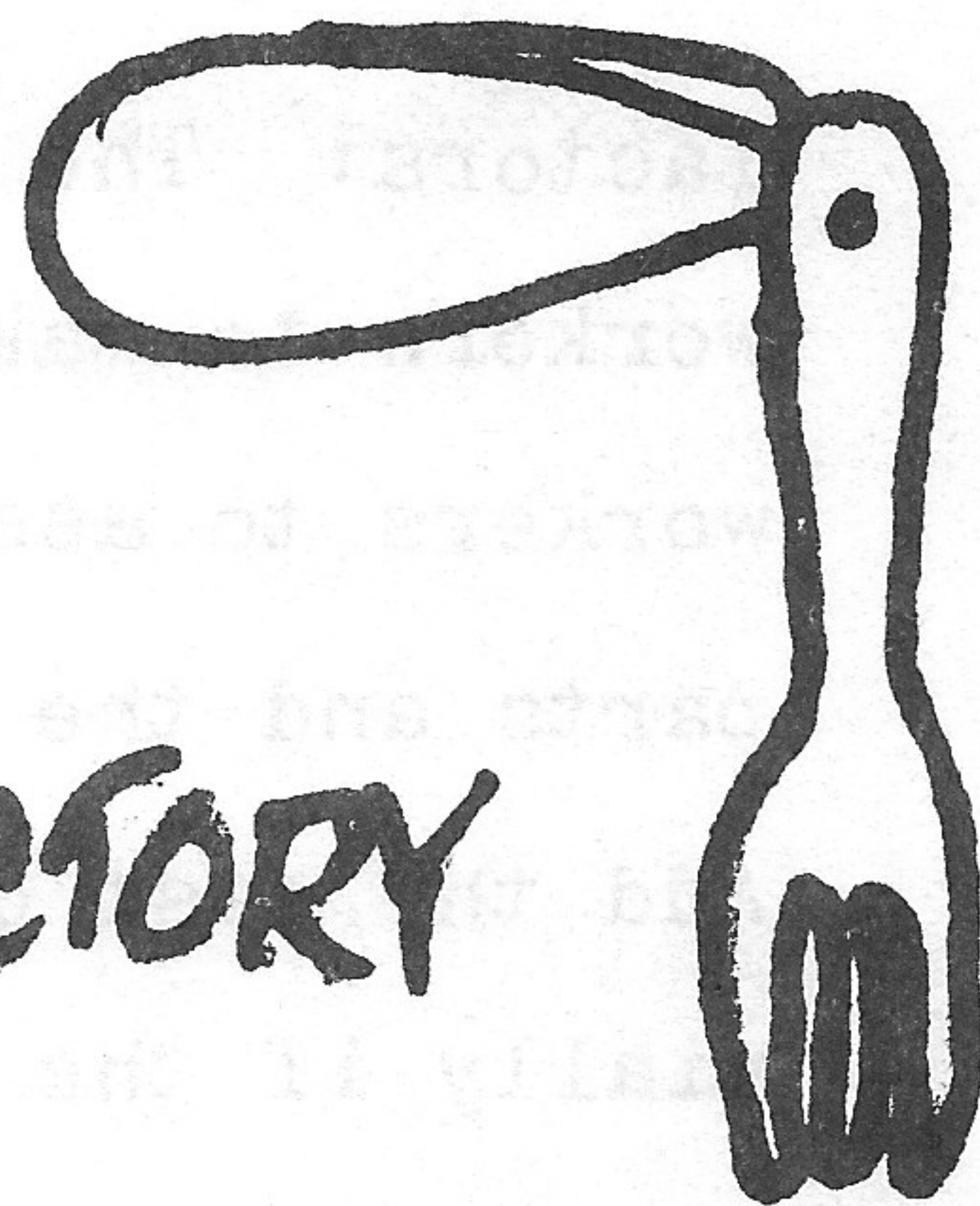
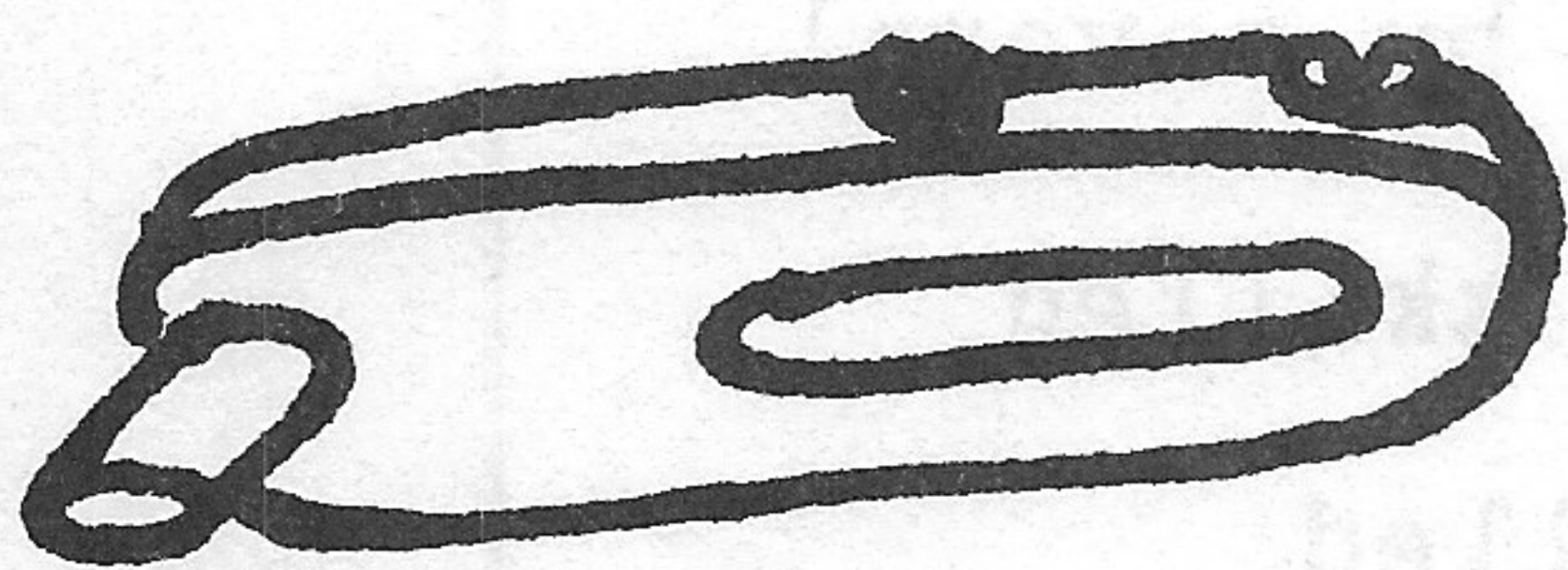
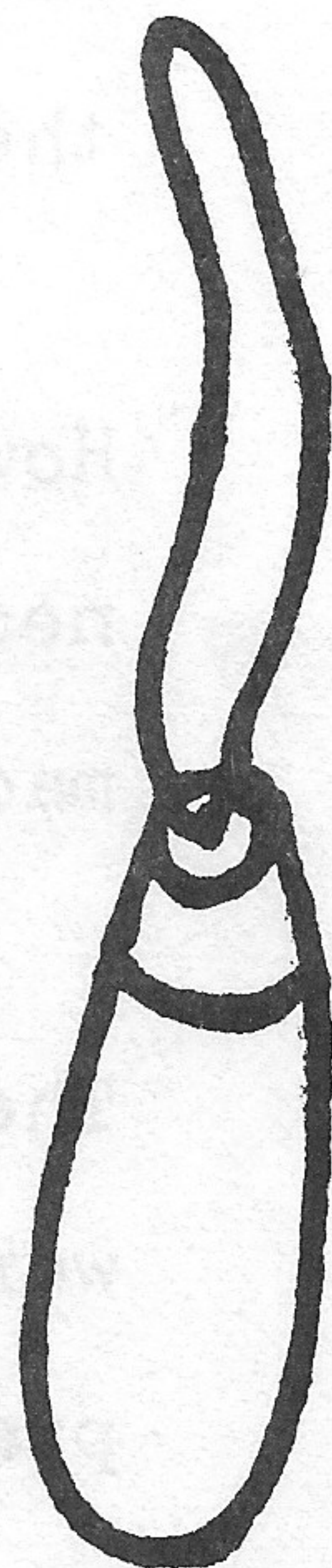
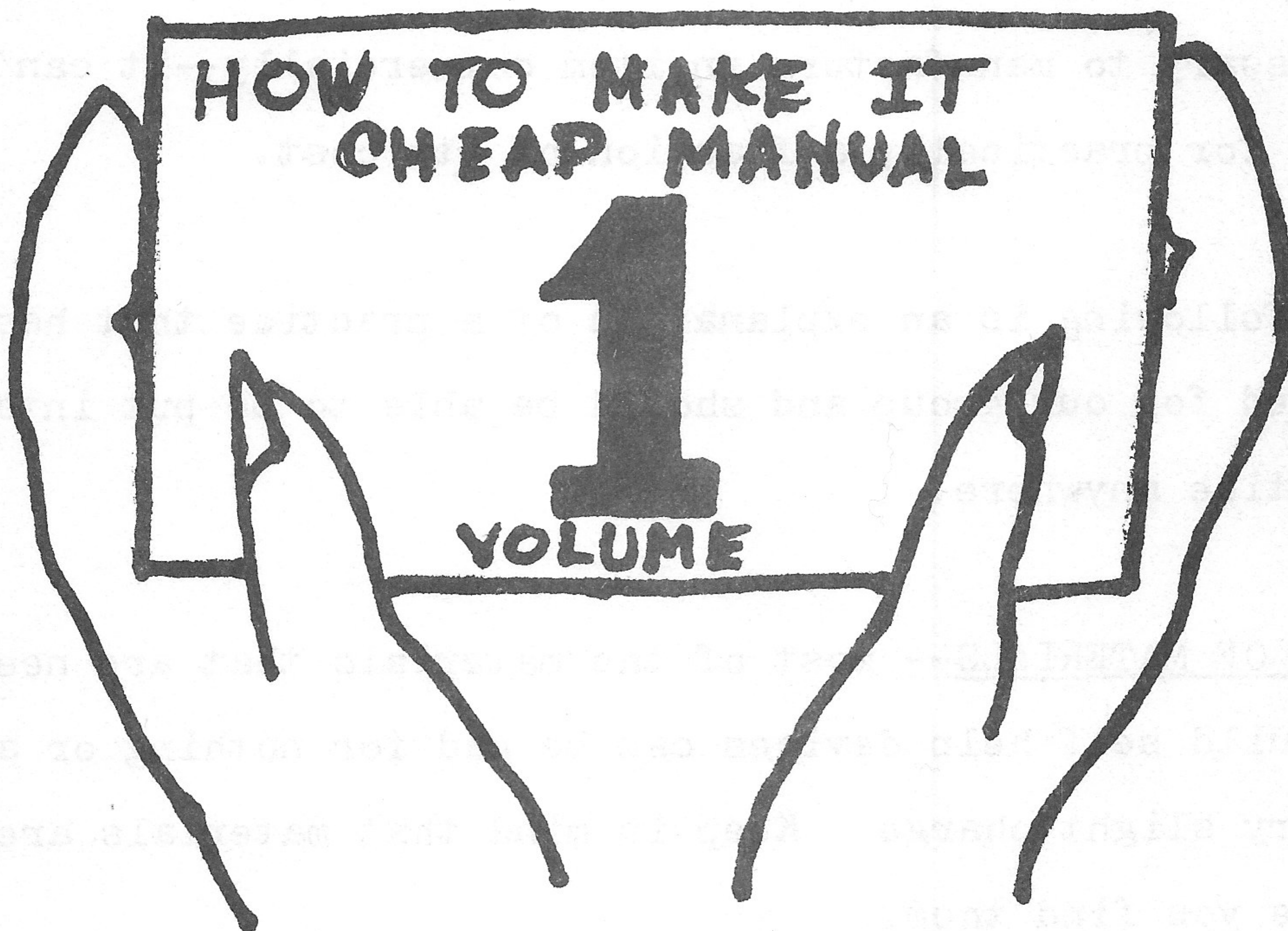
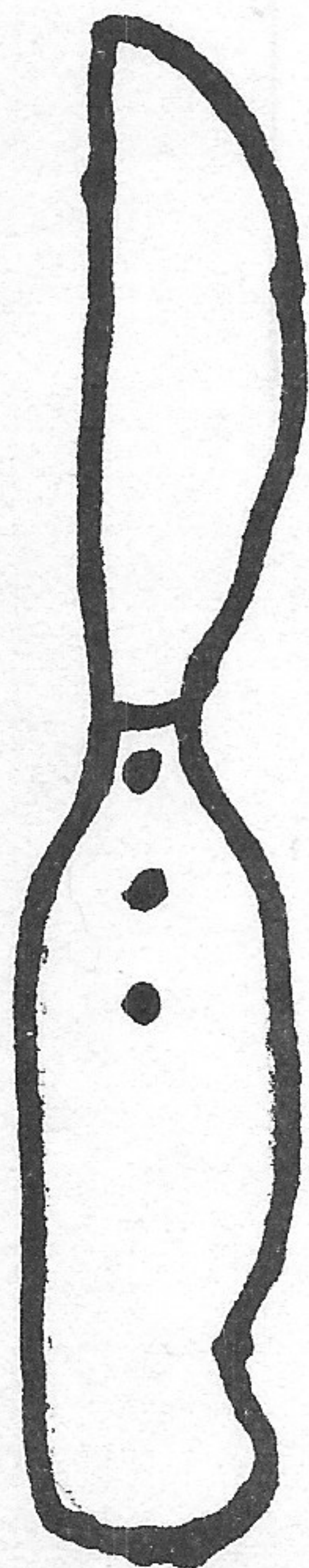




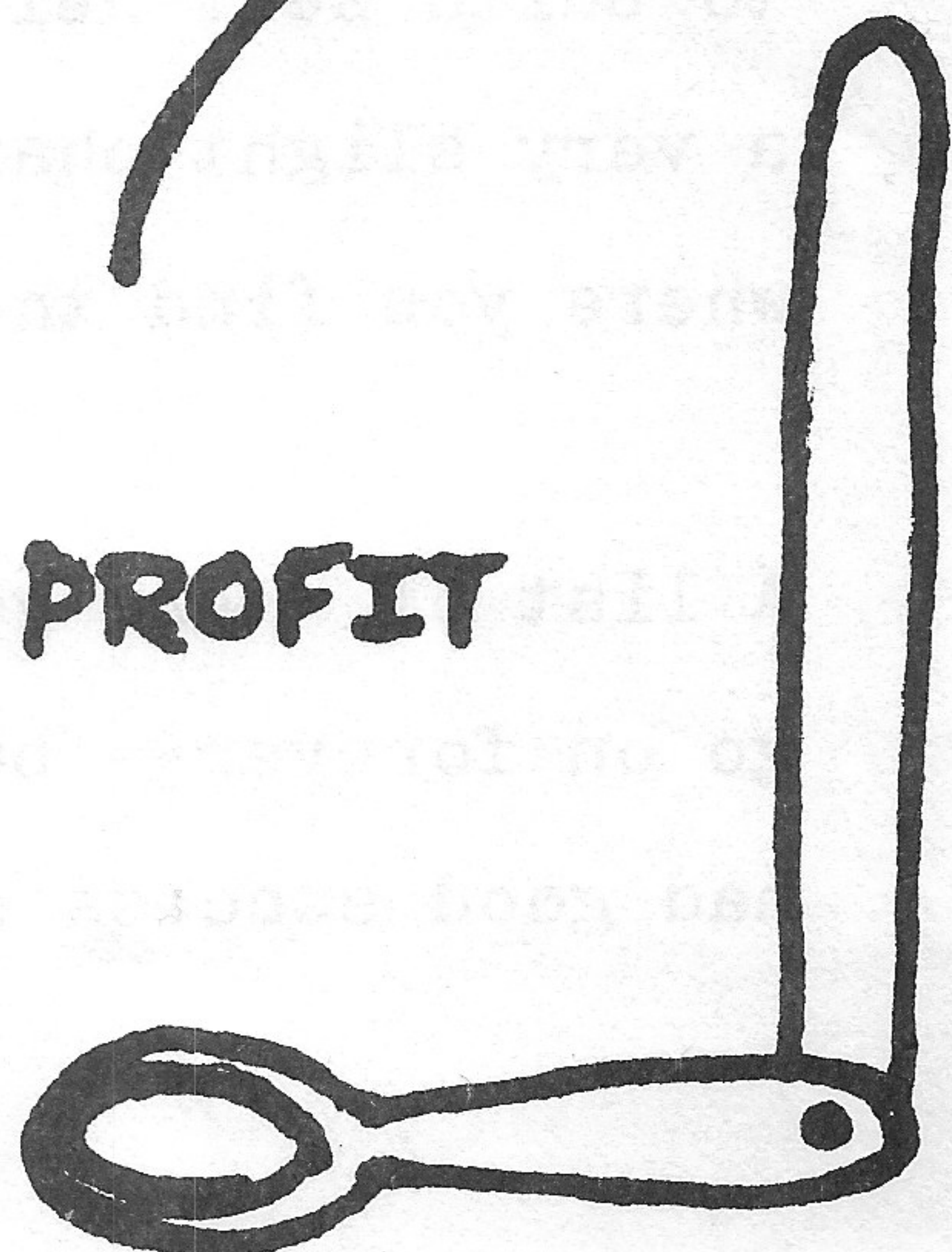
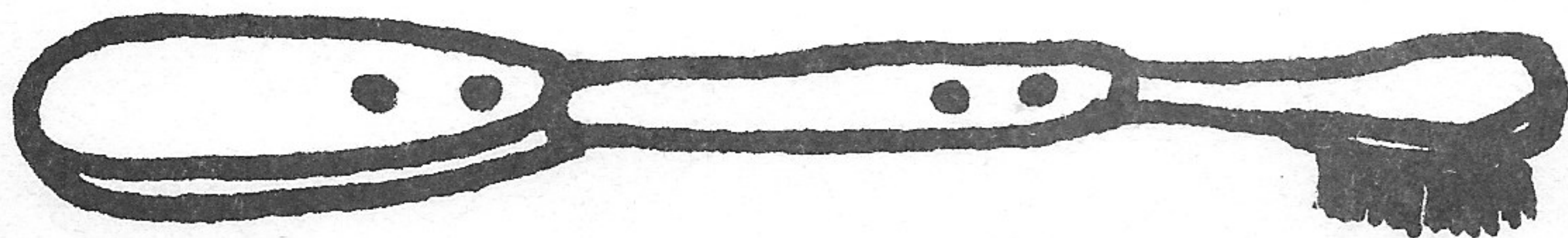
THE INDEPENDENCE FACTORY

P.O. BOX 597

MIDDLETOWN, OHIO 45042



AN ALL VOLUNTEER NON-PROFIT
ORGANIZATION



The cost of a manufactured item is determined by several factors: The cost of material; wages paid to skilled workers to make parts; wages paid to semi-skilled workers to assemble parts; wages paid to paint or finish parts and the cost of shipping the manufactured items. Add the cost of wages to the cost of material and especially if the item cannot be mass produced for most people to use and you have an expensive item. Practically all self-help devices are not mass produced, this is why they are so expensive.

However, if you are able to reduce the expenses that are necessary to manufacture an item commercially--it can be made for practically a fraction of its cost.

The following is an explanation of a practice that has worked for our group and should be able to be put into practice anywhere.

COST OF MATERIALS-- most of the materials that are needed to build self-help devices can be had for nothing or at a very slight charge. Keep in mind that materials are where you find them.

A list of where you can successfully find materials could go on forever-- but here is a partial list that we have had good success with:

- (1) Material donated by private businesses, especially small businesses like cabinet shops, lumber yards and small metal fabricating shops. They would much rather donate scrap material than money.
- (2) Scrap material donated by large factories. What is considered scrap by the factory is prime stuff to make manipulative devices from. Especially factories that use steel tubing and aluminum in their production.
- (3) Donation of material by private individuals. Many private citizens will purchase materials if the need is explained to them.
- (4) Scavenger hunts through dumps and recycling centers for such items as aluminum lawn furniture, wheels, steel tubing and so forth. The list here again is endless. The item may not be any good for what it was originally designed for-- but use your imagination and see what you can make out of it.

WAGES FOR WORKERS-- Industry is rich in skilled workers who are experts in working with tools and making things. Factories pay these people high wages. If you can get several of these skilled workers to help you on a volunteer basis, there is practically nothing that you cannot make.

Some of these special skills you should recruit are:
welders; metal workers; carpenters; electricians; spray
painters and sheet metal workers.

Another area not to be over looked are people whose hobbies
are wood working, upholstery and other similiar hobbies.
These people are skilled also and good at using power tools.

You will need some semi-skilled workers to assemble the
parts. People who need only to know how to use a screw-
driver or wrench; or can sandpaper parts to make them ready
to paint.

After reading this far you can now start to see how the
program works. Free or low cost material plus free volunteer
skilled and semi-skilled labor to manufacture items.

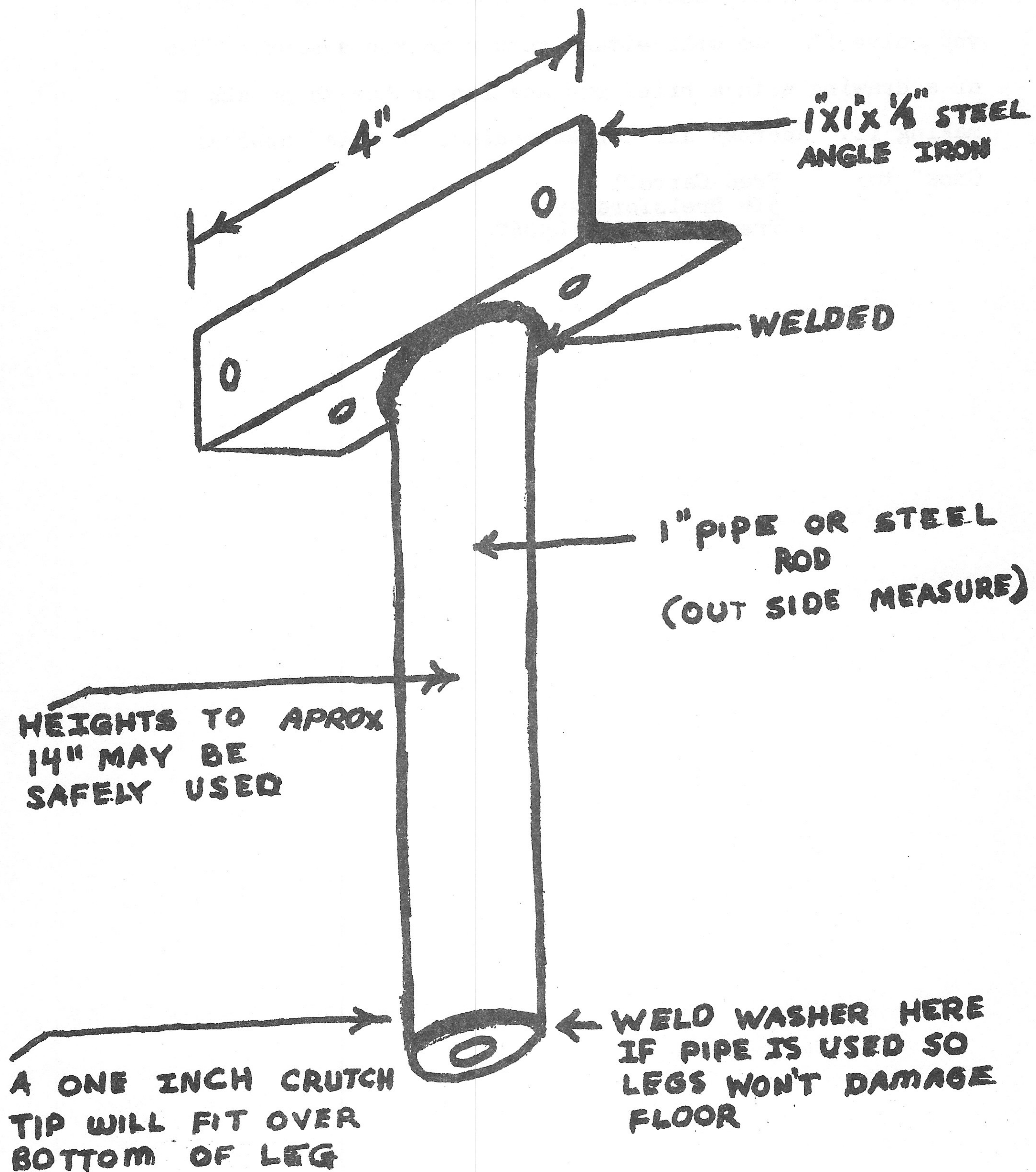
The follow ing drawings are devices that our group has
manufactured and are being used at the present time. Most
are fairly simple to make but quite effective. We will add
more drawings to this manual as we continue to make new
items.

We also have a "Special Crew" in our group that designs the
devices that we build. Many things we build in our shop
are special order items made especially for one severely
handicapped patient, which has been requested by one of the
area's home visiting teams.

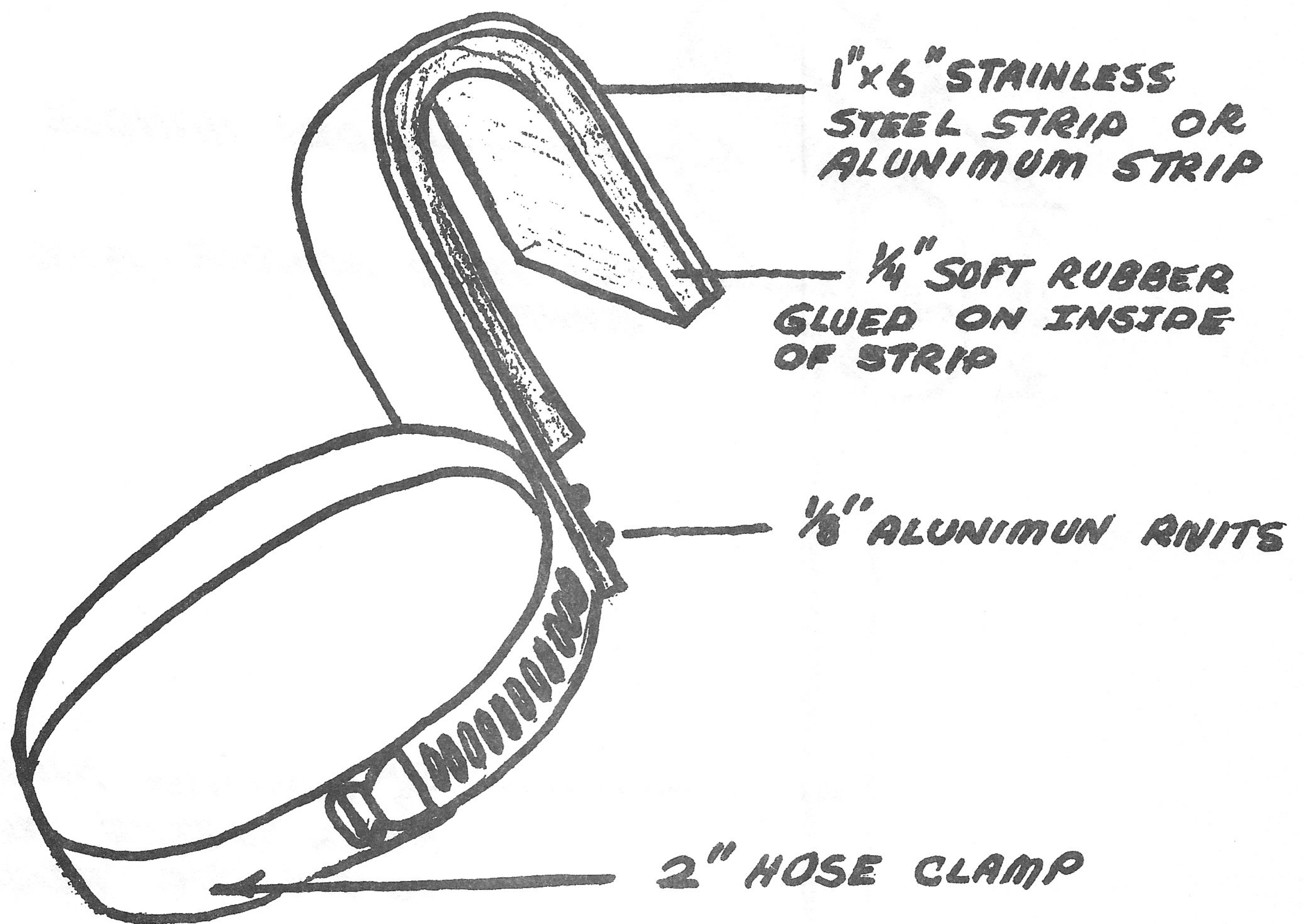
If you encounter a problem that you cannot solve, you may write to this "Special Crew" and we will try to help you solve it. We will either return to you a sample item or a drawing with a brief explanation on how to go about making it. Address all correspondence to this "Speical

Crew" to: Fred Carroll
514 Brelsford Ave.
Trenton, Ohio 45067

BED RISER LEGS

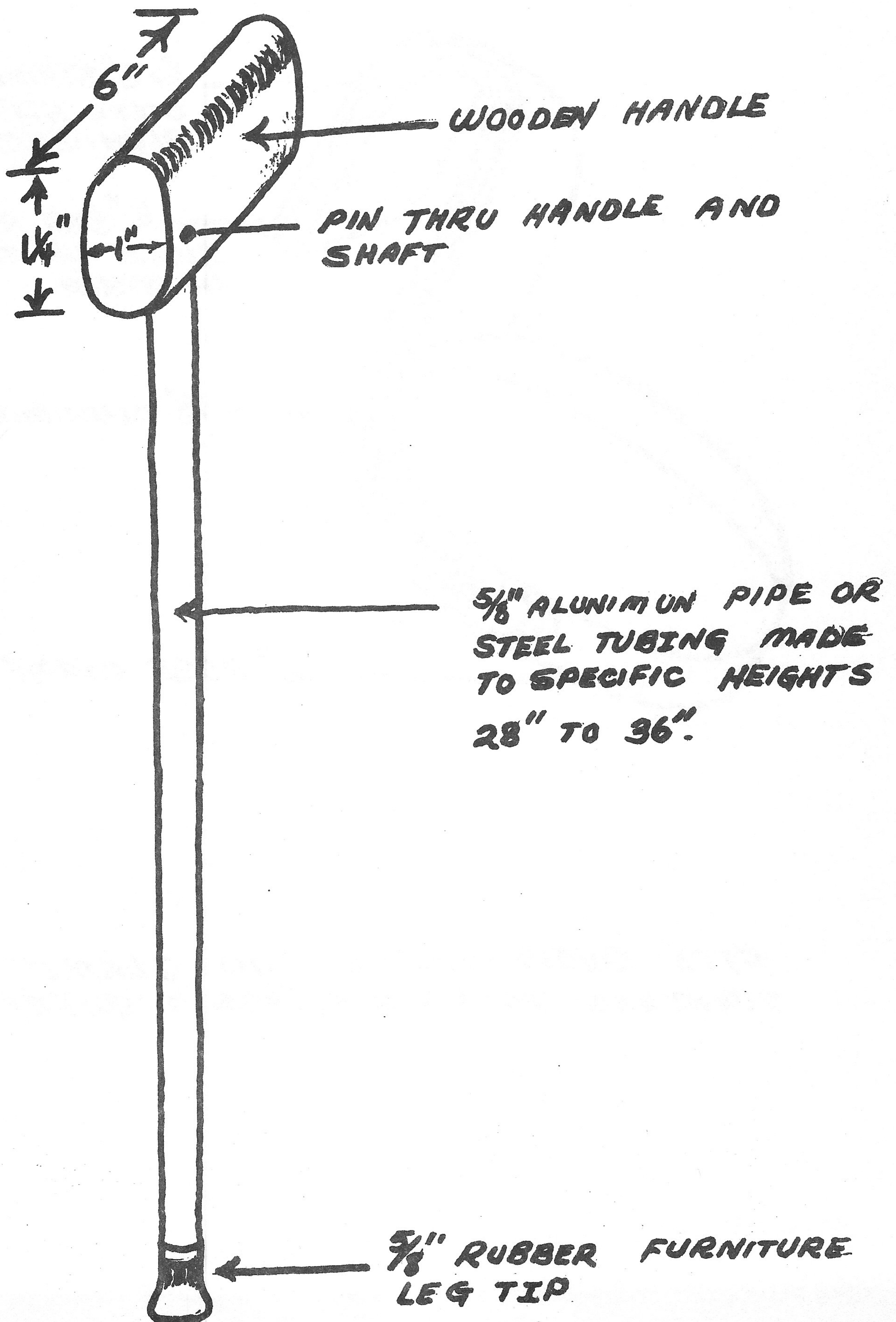


GLASS HOLDING AID



FITS OVER GLASS AND CLAMP
TIGHTENS TO HOLD GLASS TIGHTLY

CANES

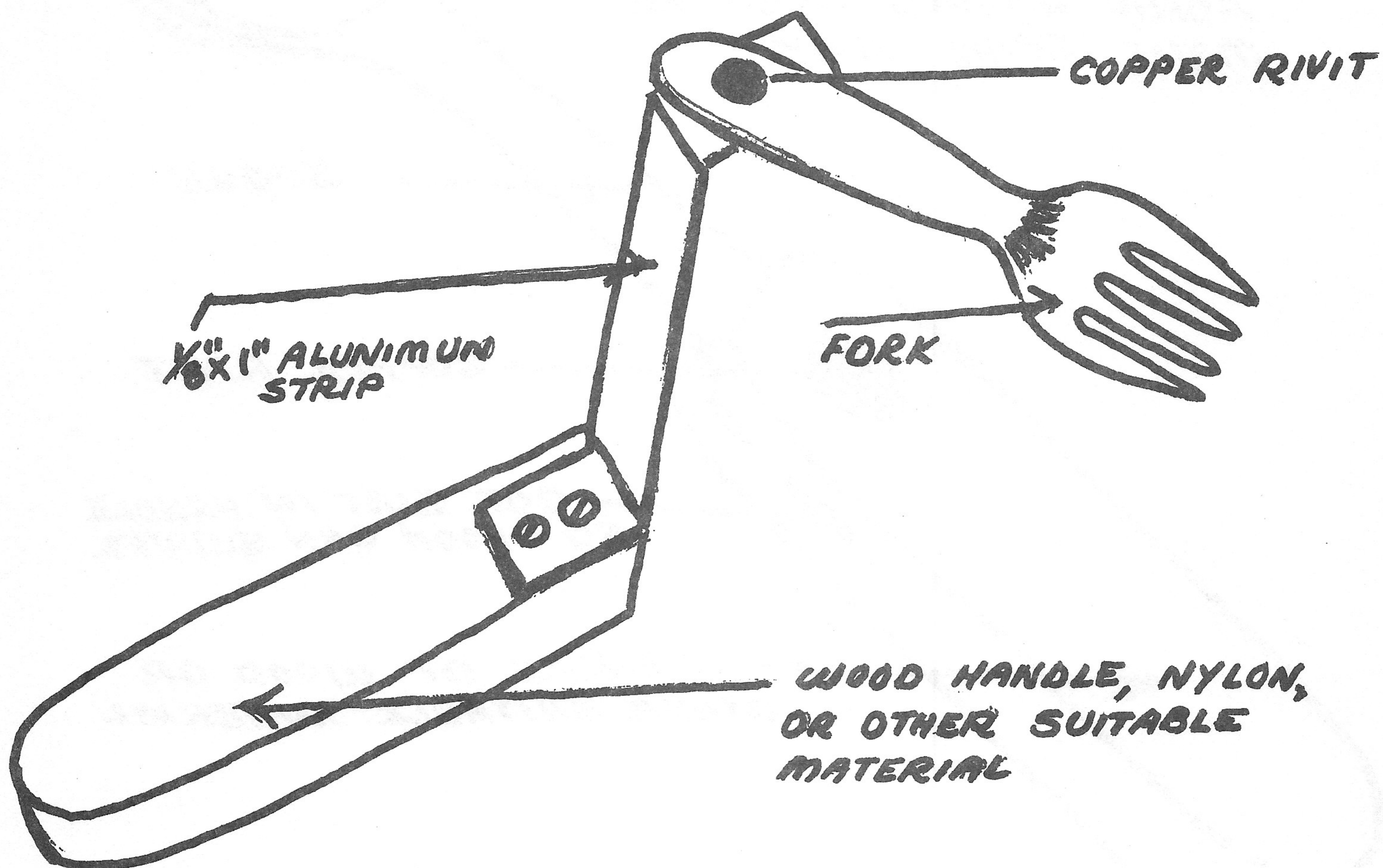


ADJUSTABLE HEIGHT SILVERWARE

PURPOSE

Adjustable height silverware is useful where there is serious restriction of movement of the arms and elbow. The plate may be raised up on a block to make getting the food on the utensil a little easier.

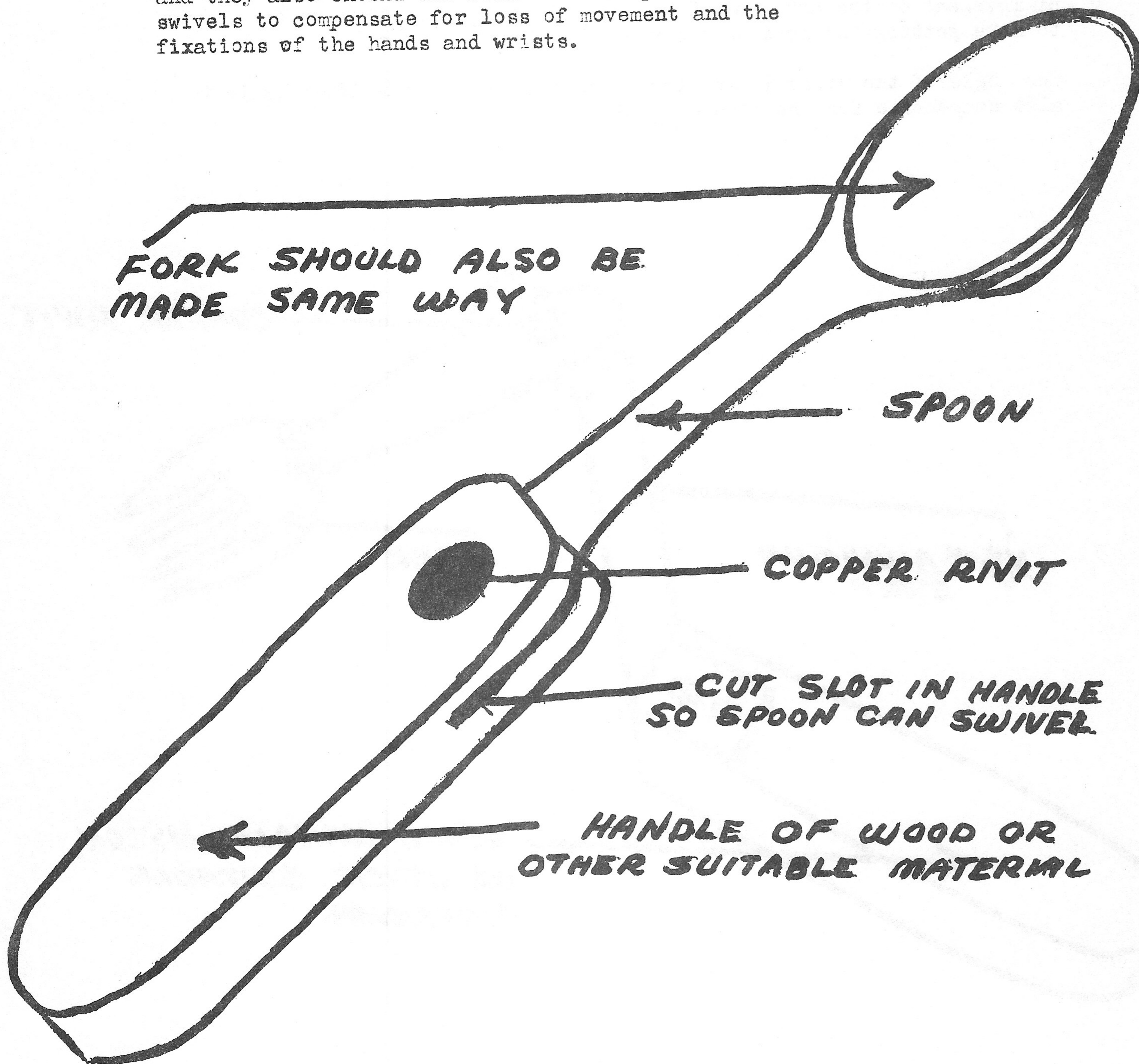
The angle of the utensil may also be changed on an individual basis to also compensate for the loss of motion.



SWIVEL FORK AND SPOON

PURPOSE

Larger handles on eating utensils make them much easier to hold and they also extend the reach. This special silverware also swivels to compensate for loss of movement and the fixations of the hands and wrists.

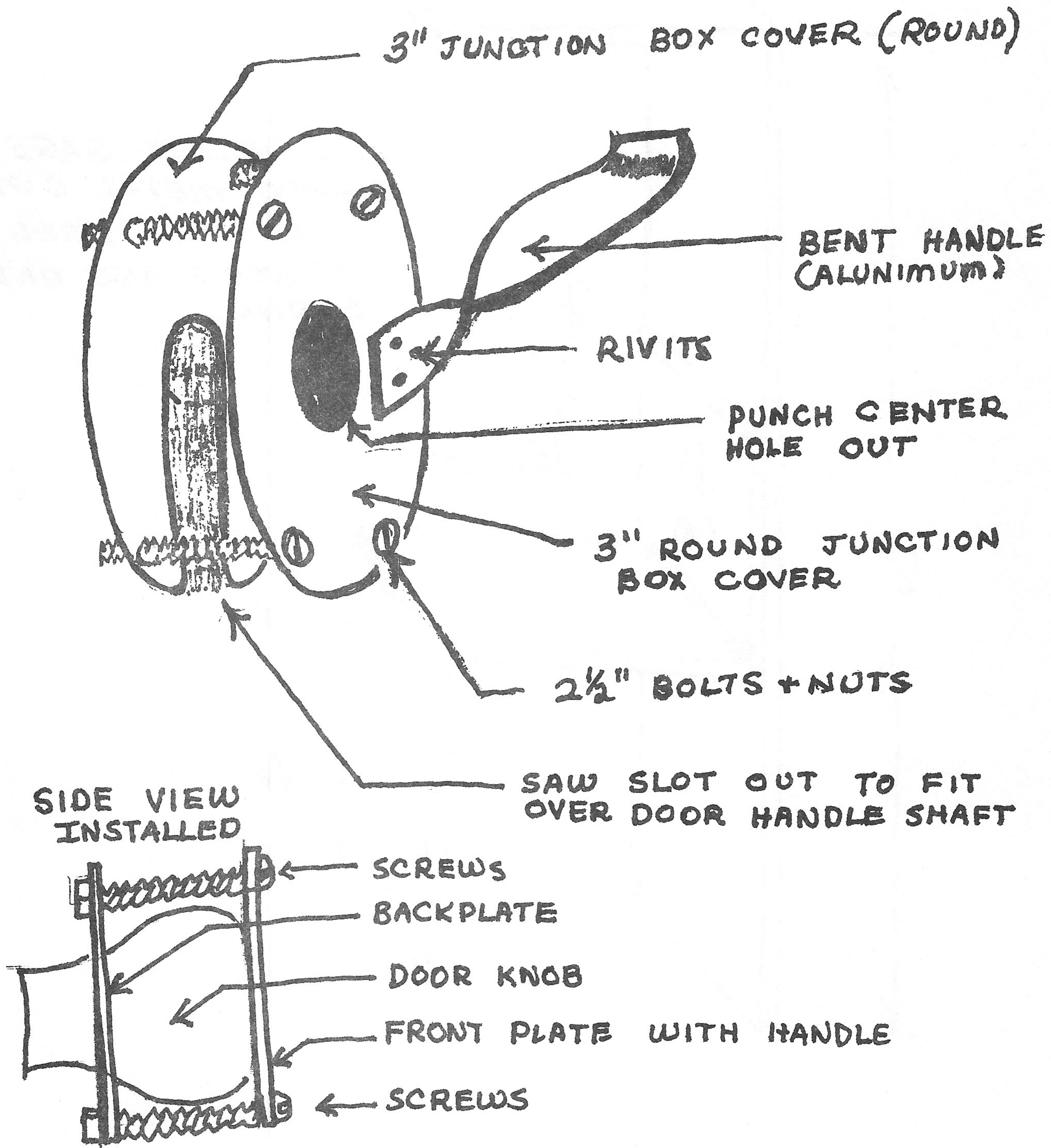




DOOR HANDLE OPENER. AID

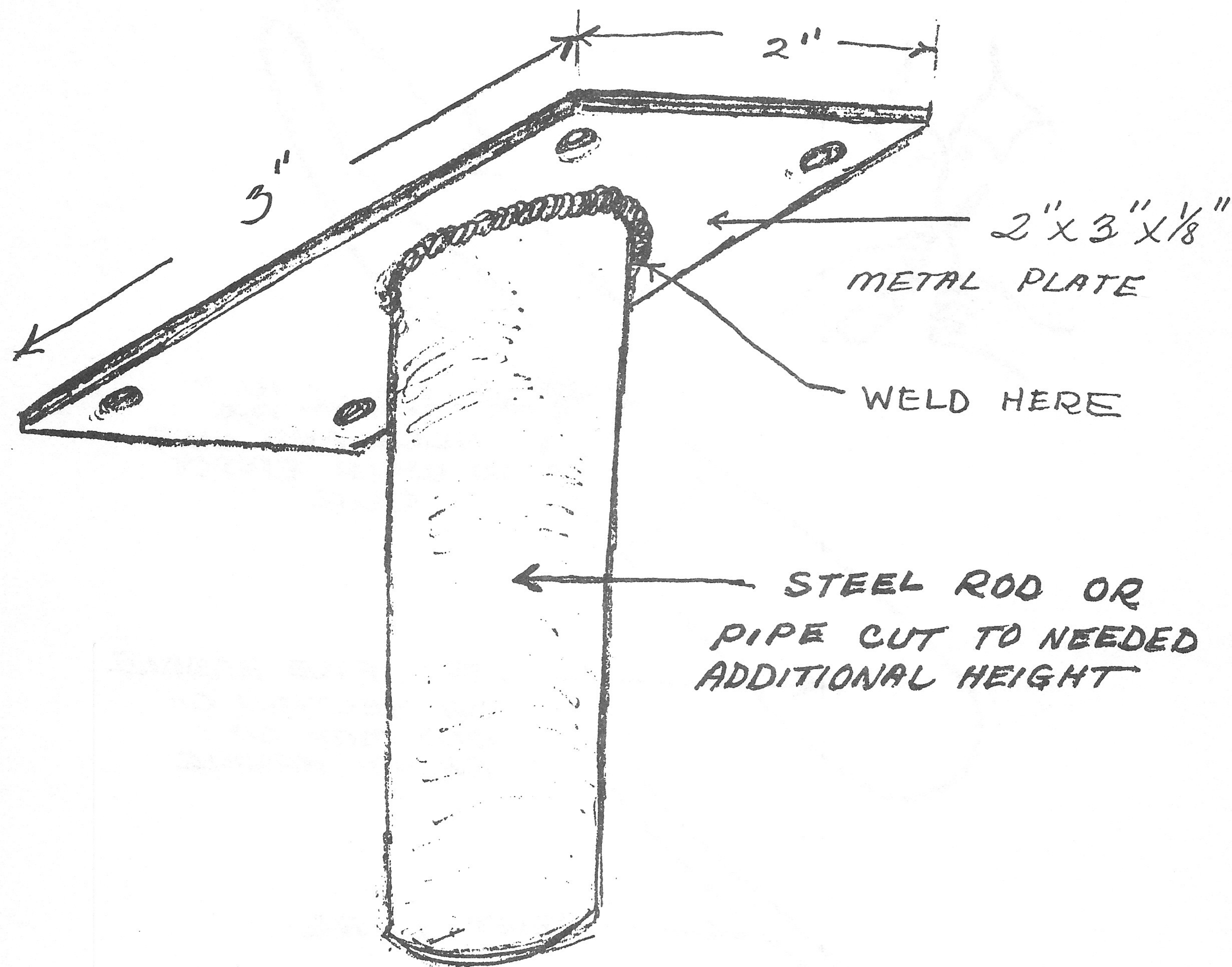
PURPOSE

This aid utilizes the added leverage of the lever handle to make opening doors much easier, especially in cases of severe loss of strength. In cases of severe fixation the handle may be operated with the back of the hand, wrist, or even forearm.



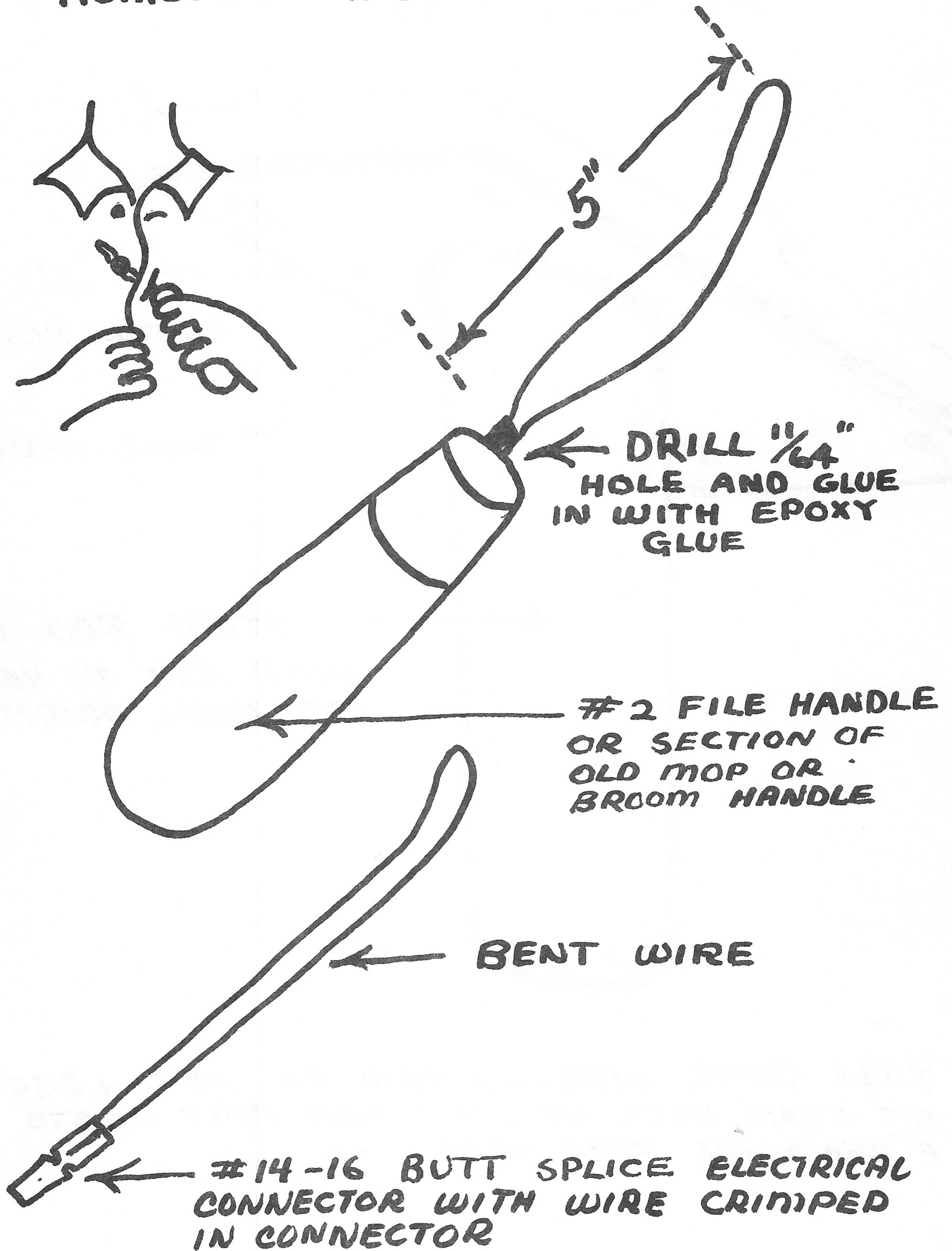
HEIGHT INCREASE FOR RECLINER CHAIRS

Chairs are much easier to get in and out of the higher they are. If the upper part of the legs are lower than the knees, it is difficult to rise. By adding extended legs to the chairs, it naturally puts the upper portion of the leg on a position that they become angled upward and then they are above the knees.



TURN CHAIR OVER...SCREW ON NEW LEGS-
SIT CHAIR BACK UP - YOU HAVE JUST RAISED
A CHAIR THE EASY WAY.....

HOMEMADE BUTTON DEVICE



EXTENDED Comb

LARGE TOOTH COMB

POP RIVETS

FLATTEN THIS SECTION

$\frac{1}{4}$ " COPPER TUBING

DRILL $\frac{1}{4}$ " HOLE
AND GLUE IN
WITH EPOXY
GLUE

OLD MOP OR BROOM
HANDLE OF ANY
NECESSARY LENGTH

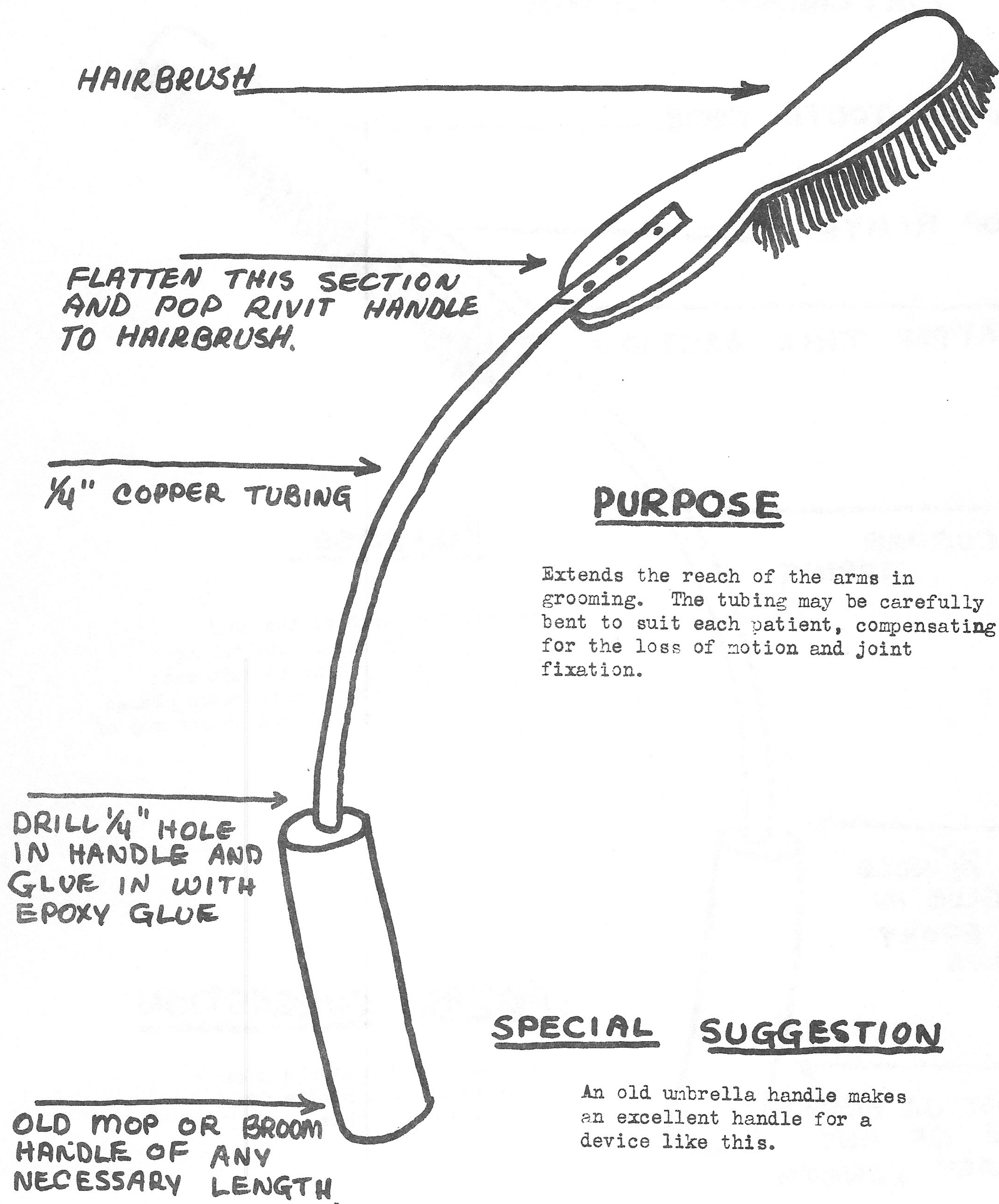
PURPOSE

Extends the reach of the arms in combing the hair. The tubing may be carefully bent to suit each patient, allowing them to reach places like the back of the head or the top of the head.

SPECIAL SUGGESTION

An old umbrella handle makes a good ready made handle for a device such as this.

EXTENDED HAIRBRUSH



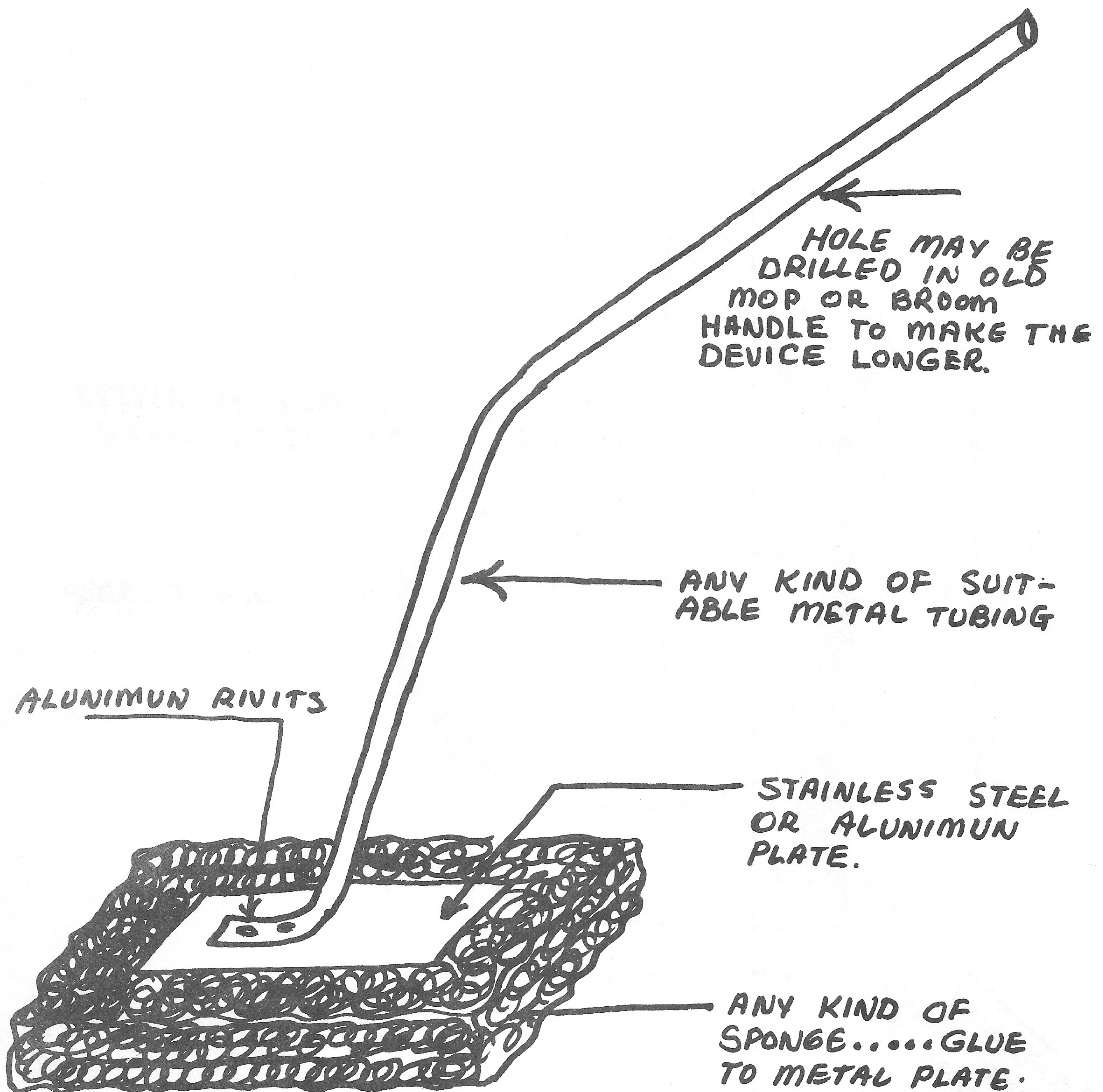
PURPOSE

Extends the reach of the arms in grooming. The tubing may be carefully bent to suit each patient, compensating for the loss of motion and joint fixation.

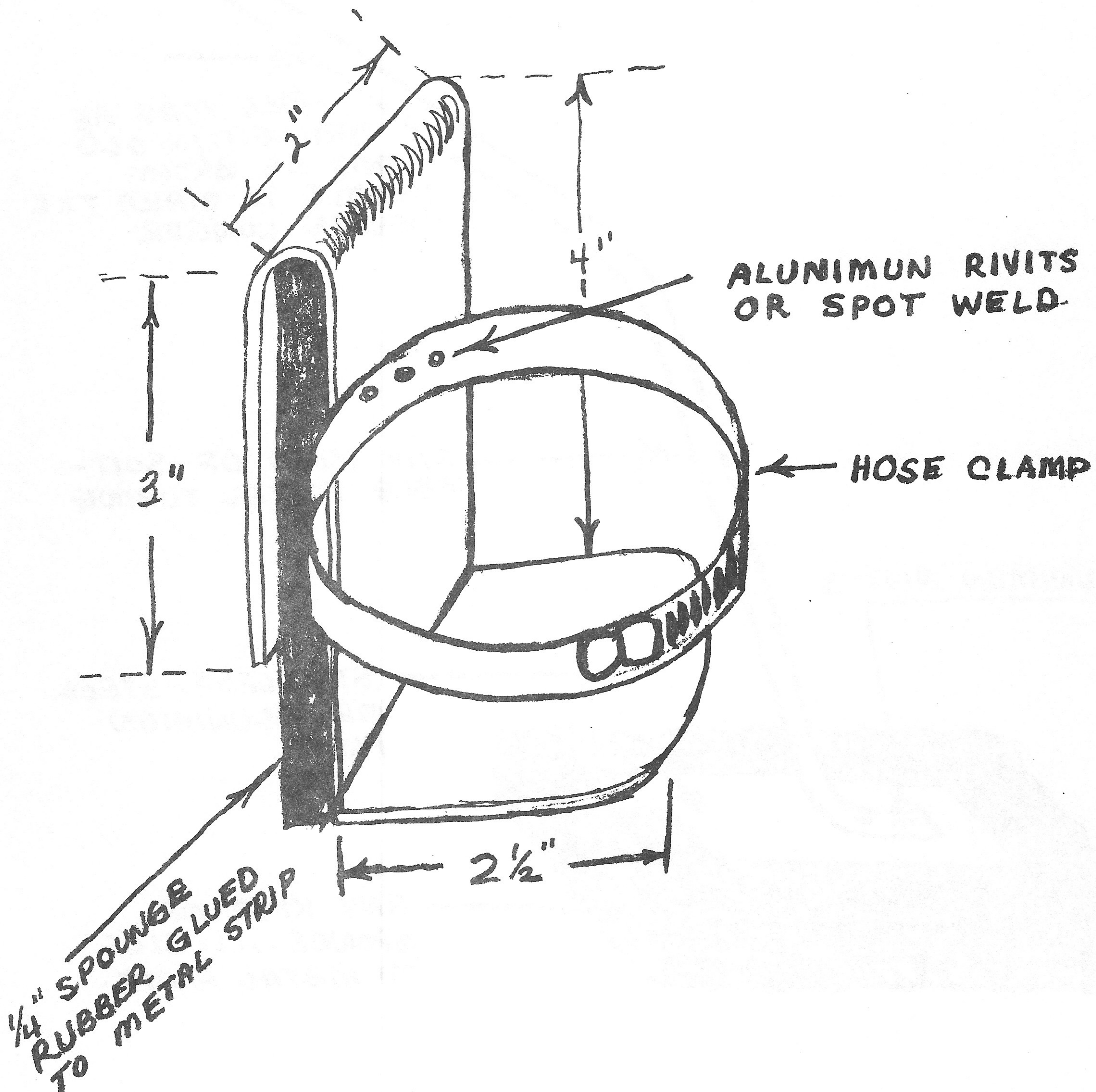
SPECIAL SUGGESTION

An old umbrella handle makes an excellent handle for a device like this.

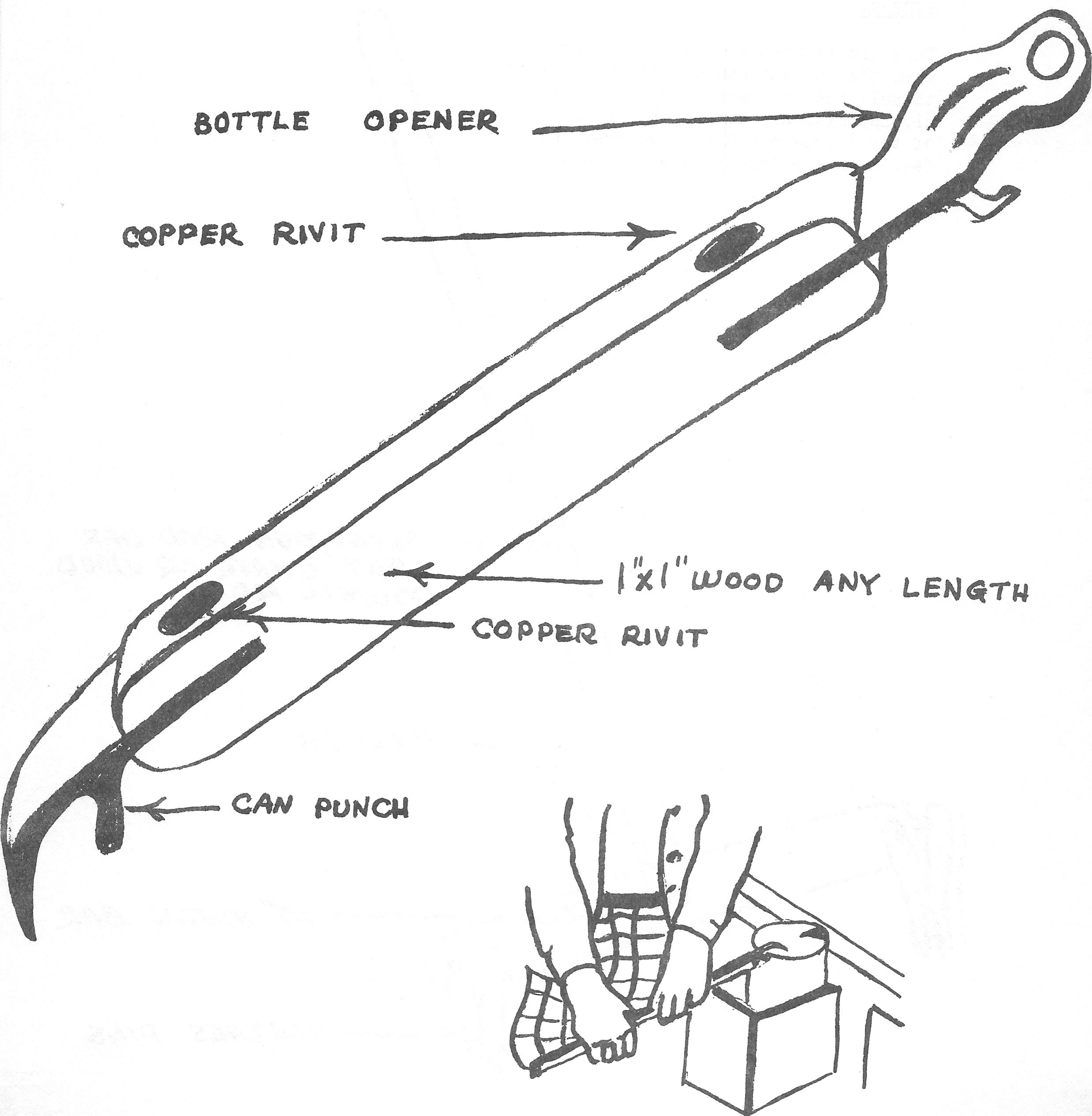
NO BEND SPONGE CLEANER



DRINK HOLDER FOR WHEELCHAIR



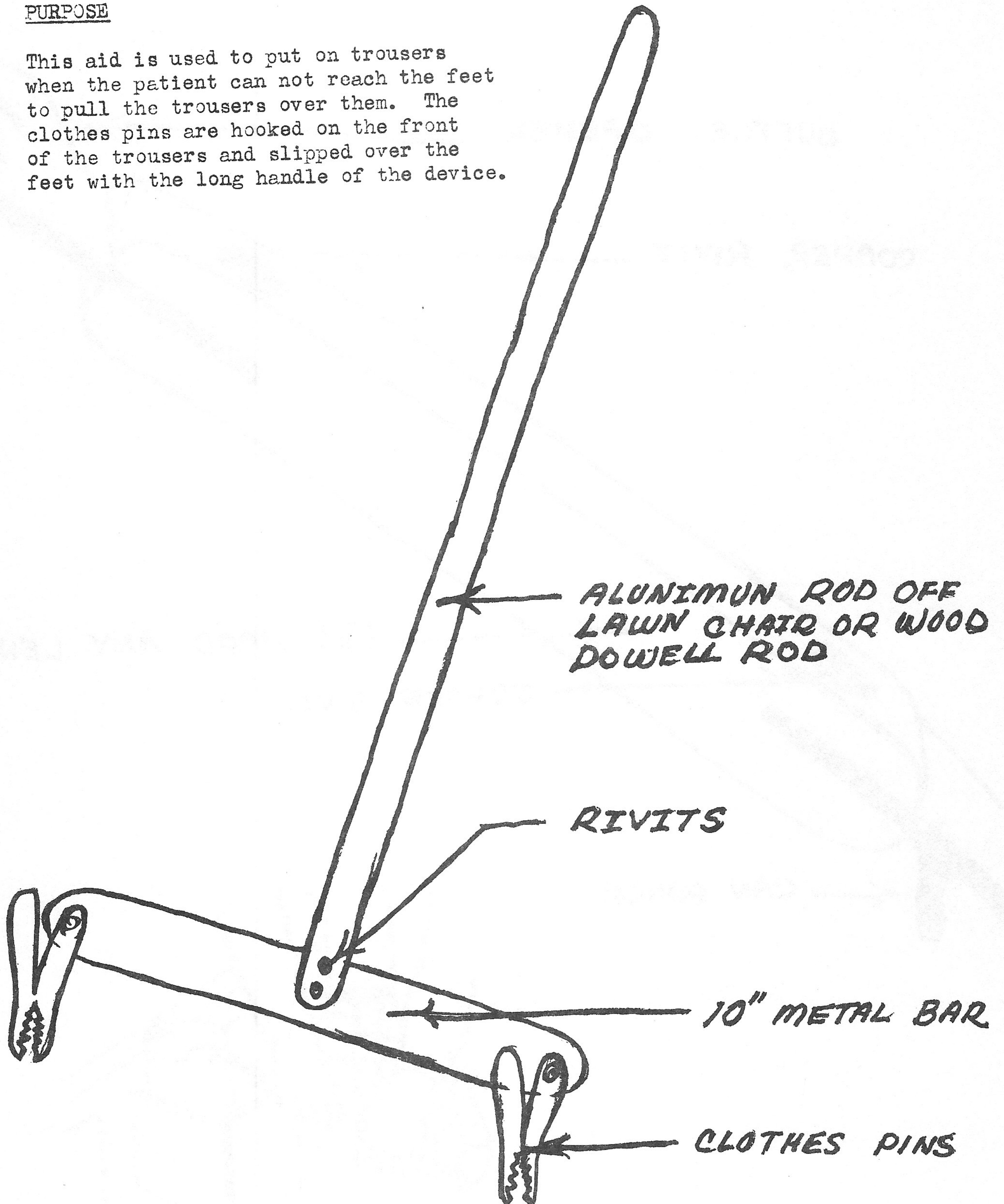
POP BOTTLE AND CAN PUNCH



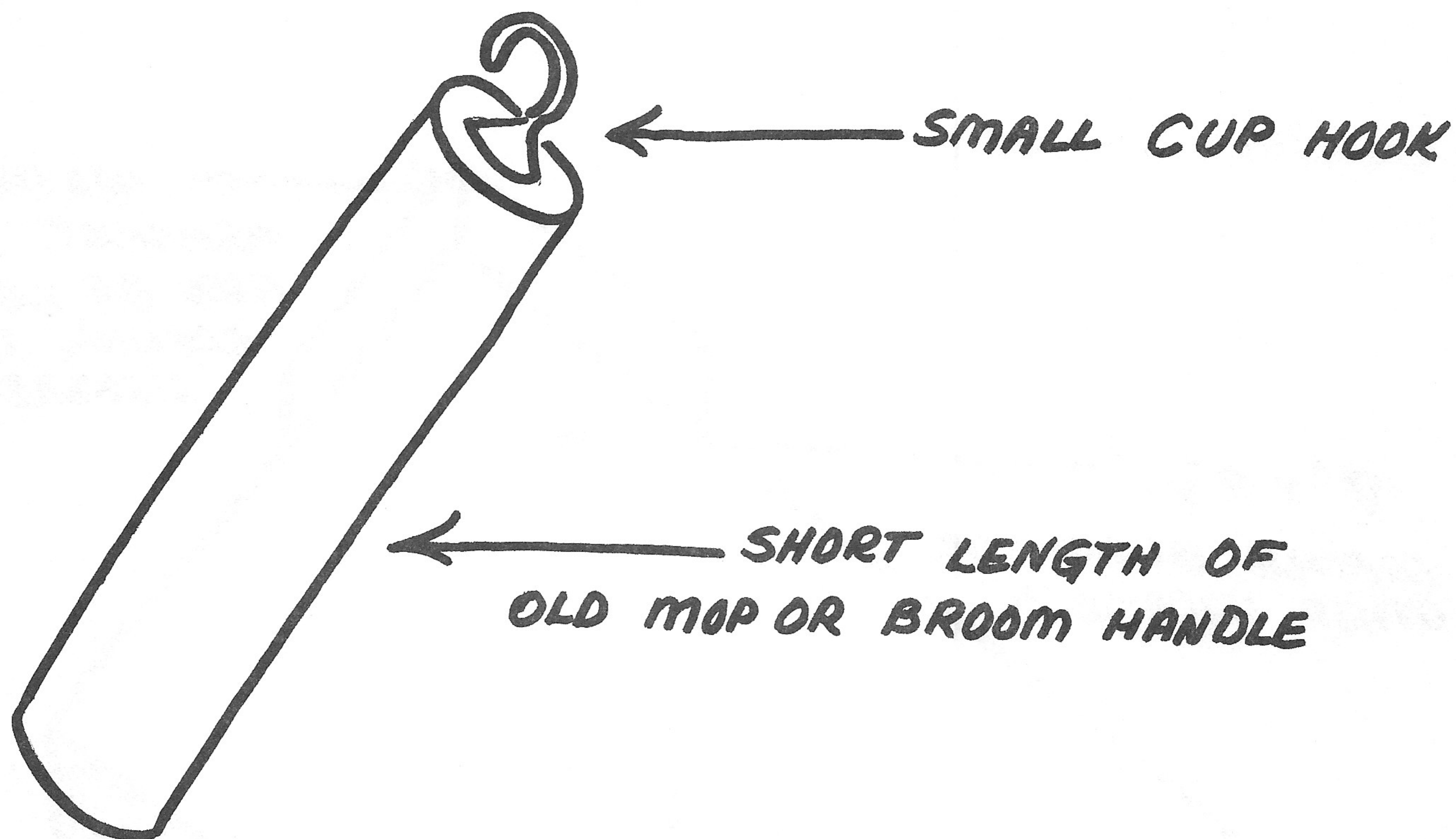
LONG HANDLED TROUSER AID

PURPOSE

This aid is used to put on trousers when the patient can not reach the feet to pull the trousers over them. The clothes pins are hooked on the front of the trousers and slipped over the feet with the long handle of the device.



SHORTY ZIPPER PULL



PURPOSE

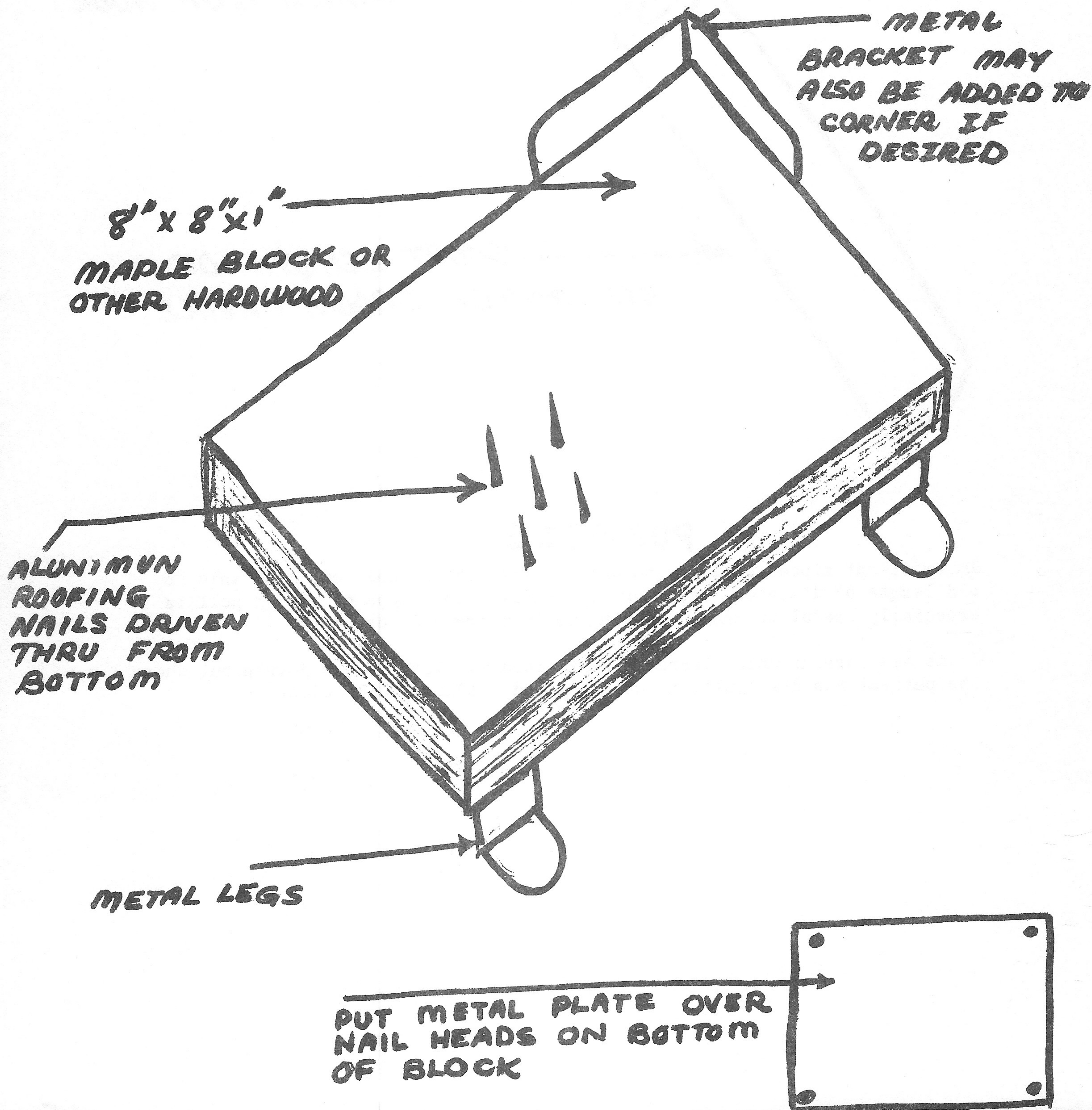
An excellent zipper pull may be made by screwing a small cup hook into an old length of discarded broom or mop handle. This type of zipper pull is especially useful to men in zipping up trousers and for coats.

It is also useful where there is still good mobility of the joints but where the patient has difficulty in grasping and holding small objects.

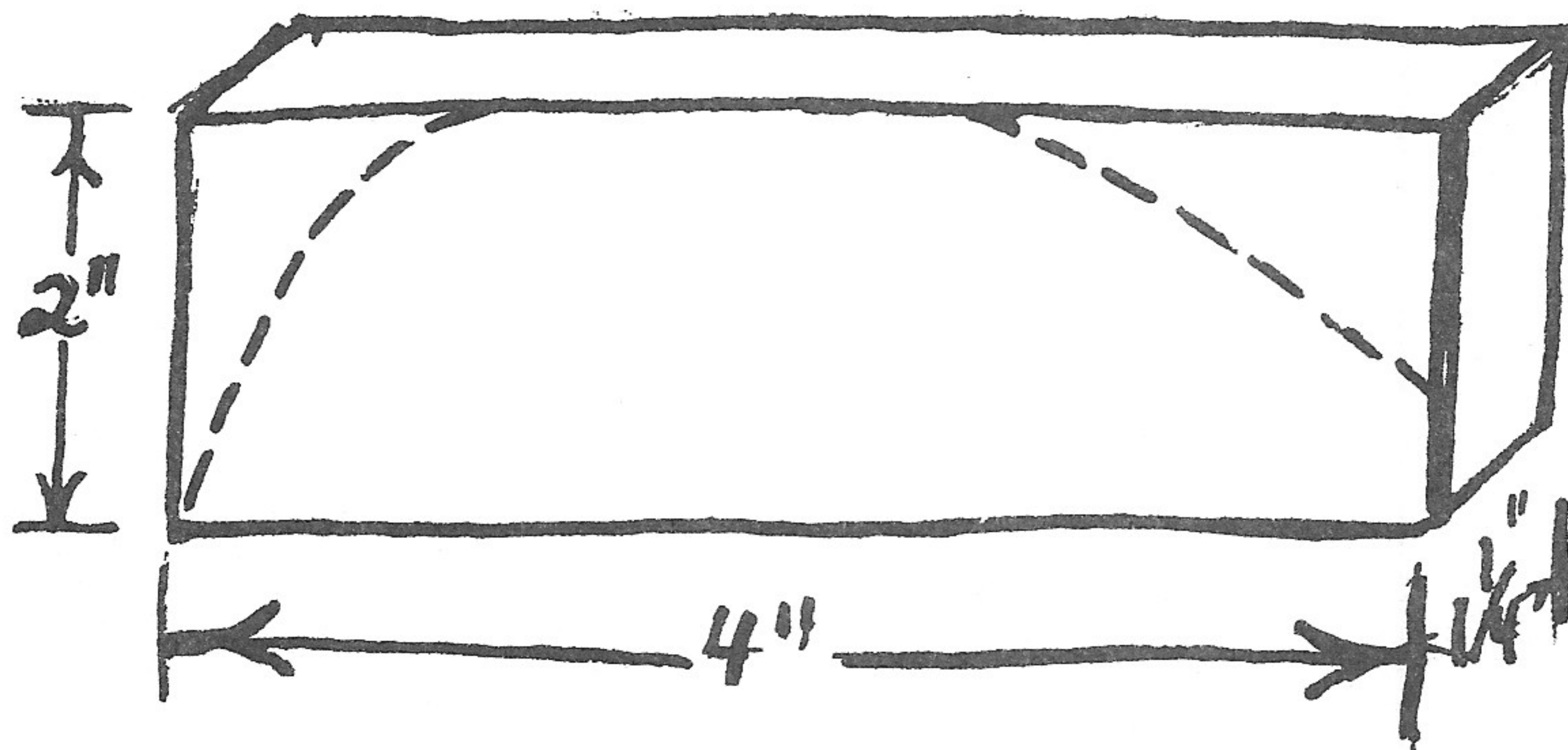
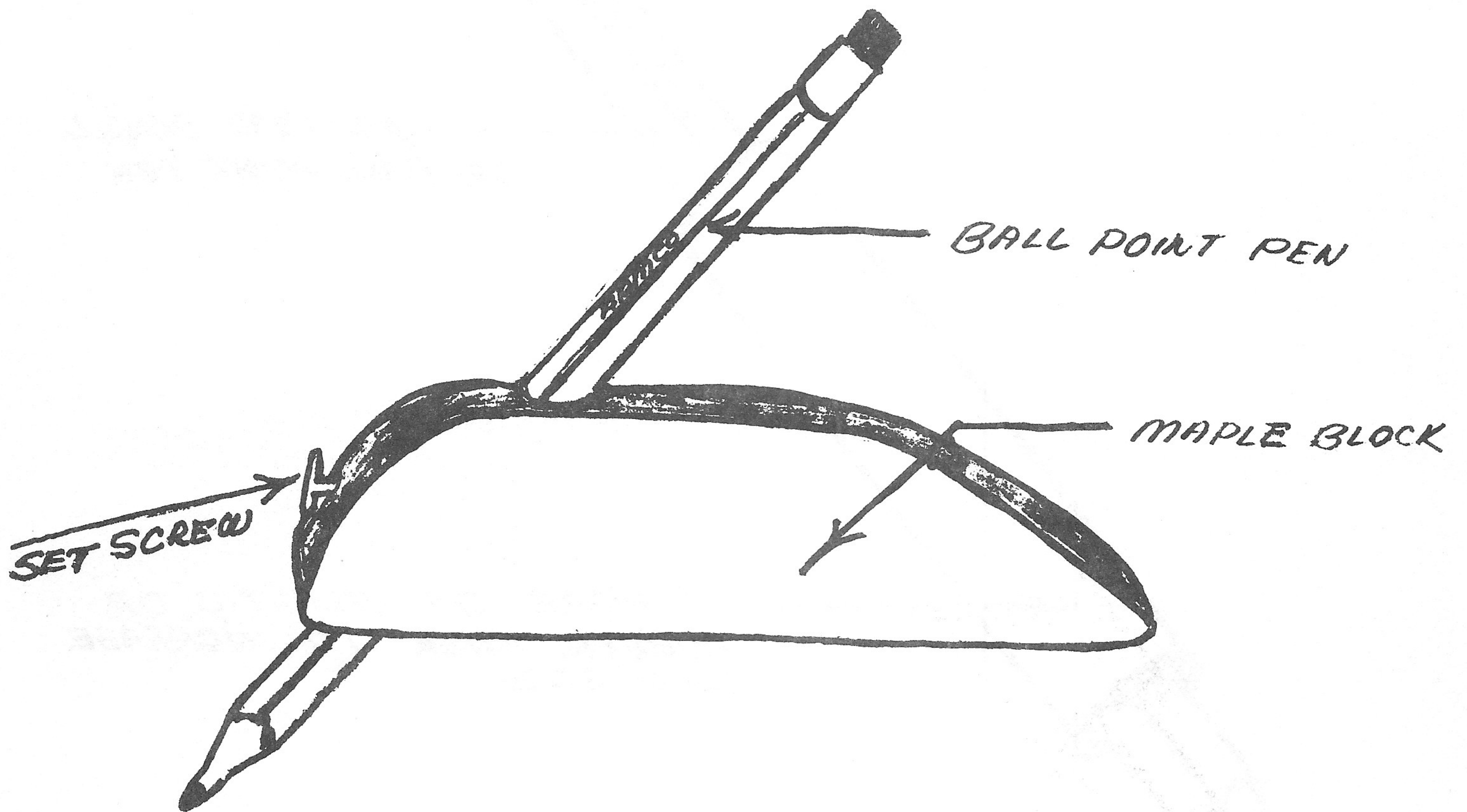
CUTTING BLOCK WITH SCEWERS

PURPOSE

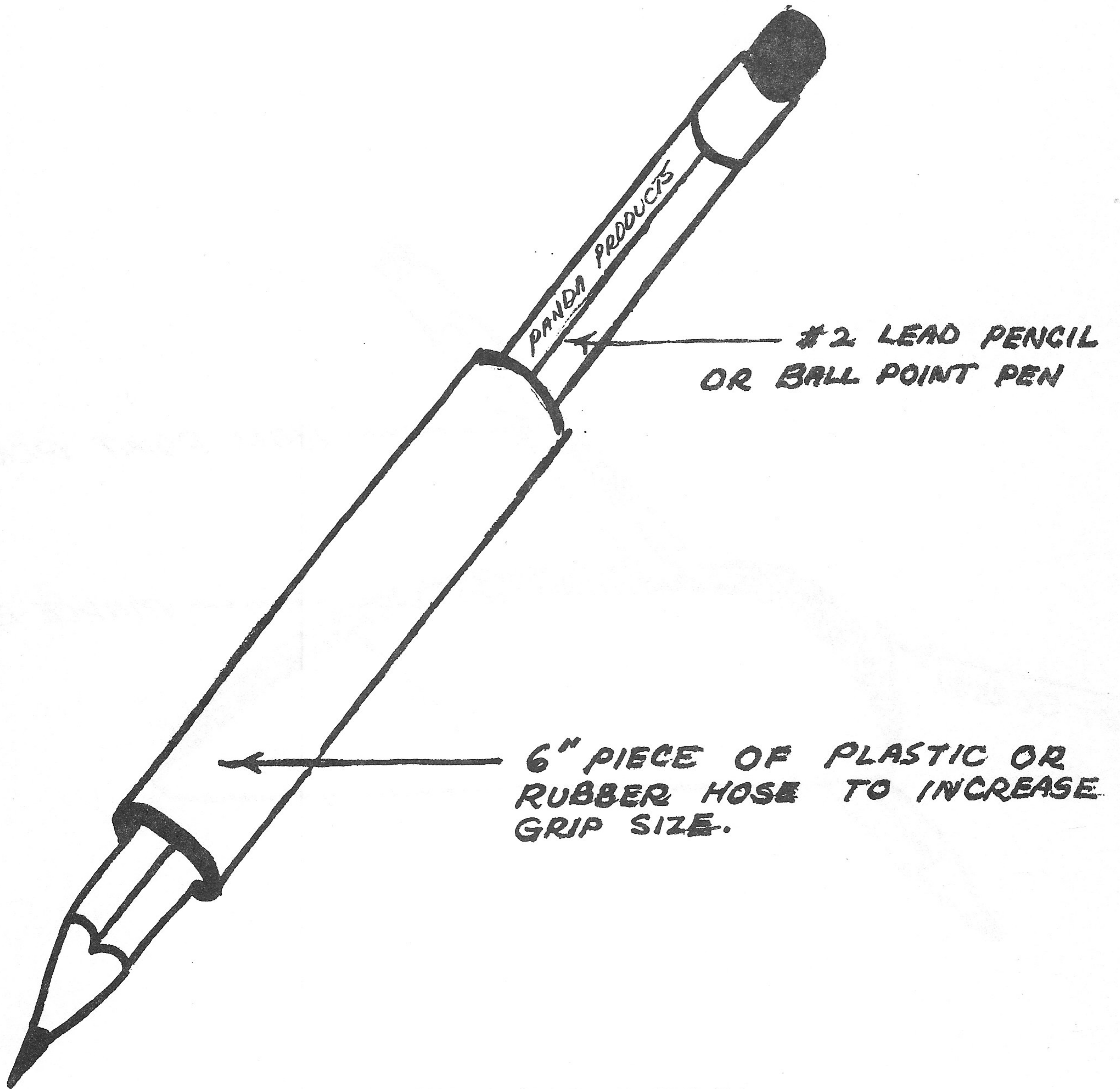
To hold items that are being cut. The scewers up through the block help hold the item being cut. The special corner on one corner of the cutting block is used to help hold the bread when spreading bread with butter or similar substance when the patient is one handed.



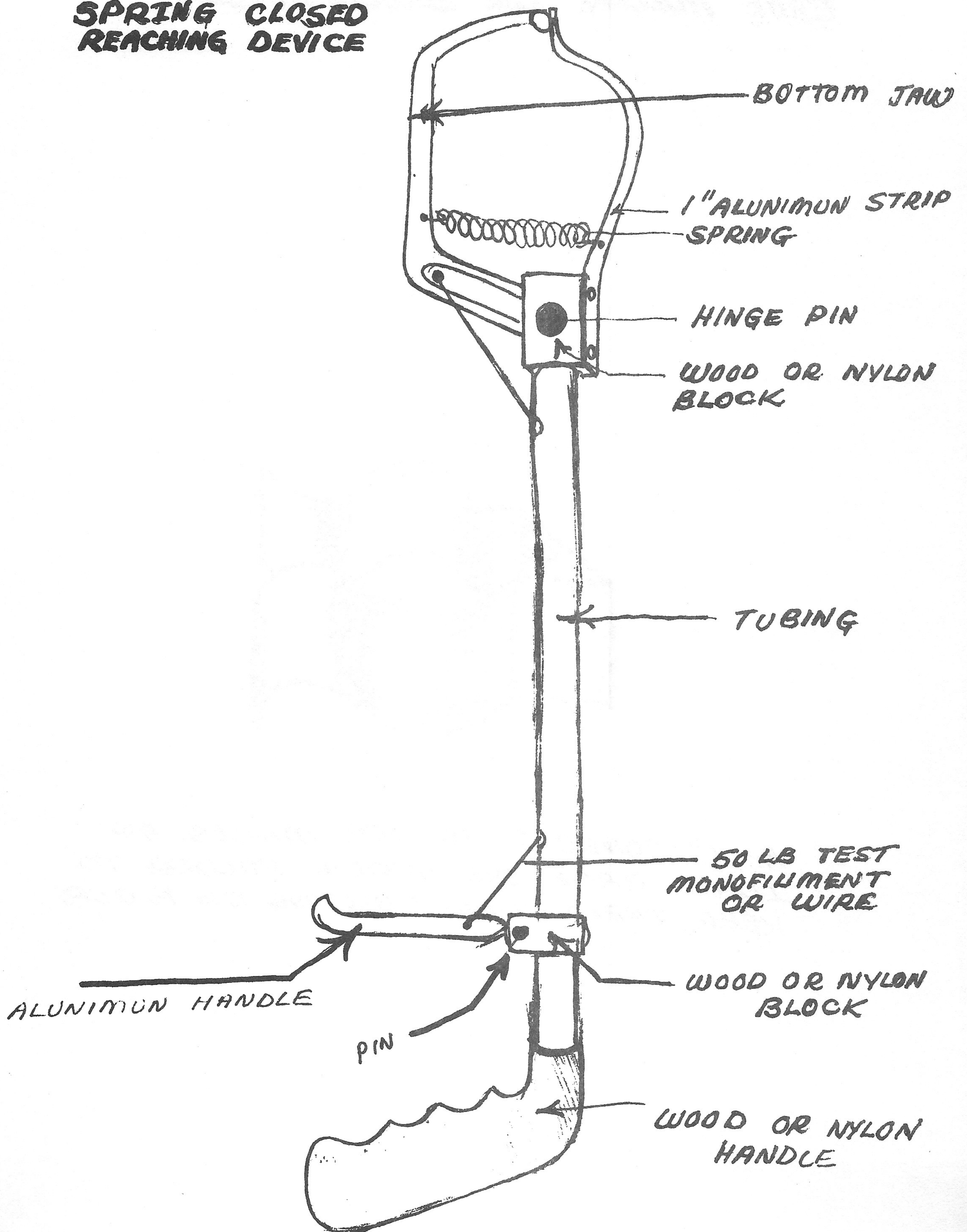
BALL POINT PEN HOLDER



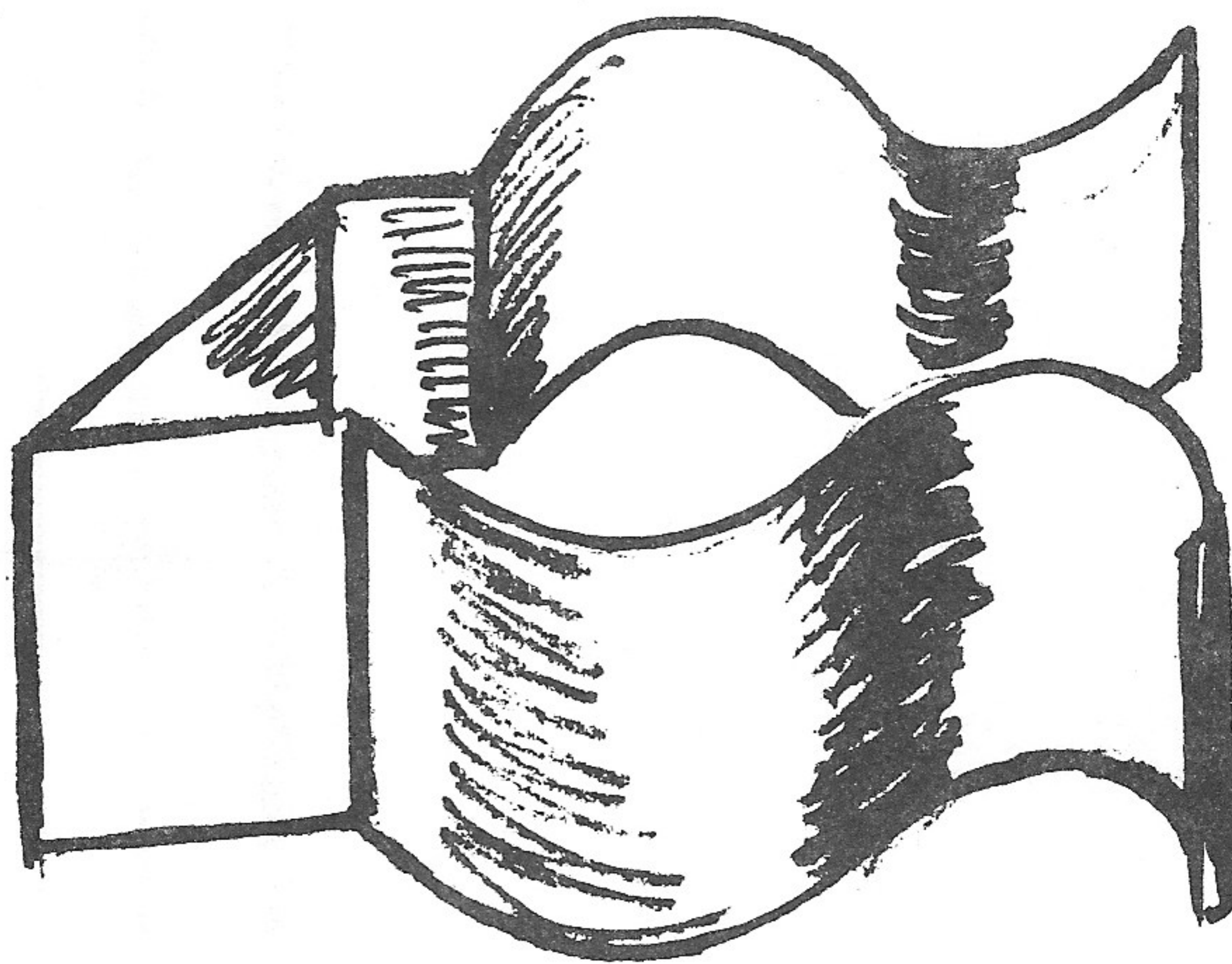
WRITING AID TO INCREASE GRIP



SPRING CLOSED REACHING DEVICE



CANE HOLDER OR BROOM HOLDER



A 1" CONDUIT HOLDER MAKES AN
IDEAL CANE OR BROOM HOLDER TO
KEEP THEM FROM FALLING ON FLOOR

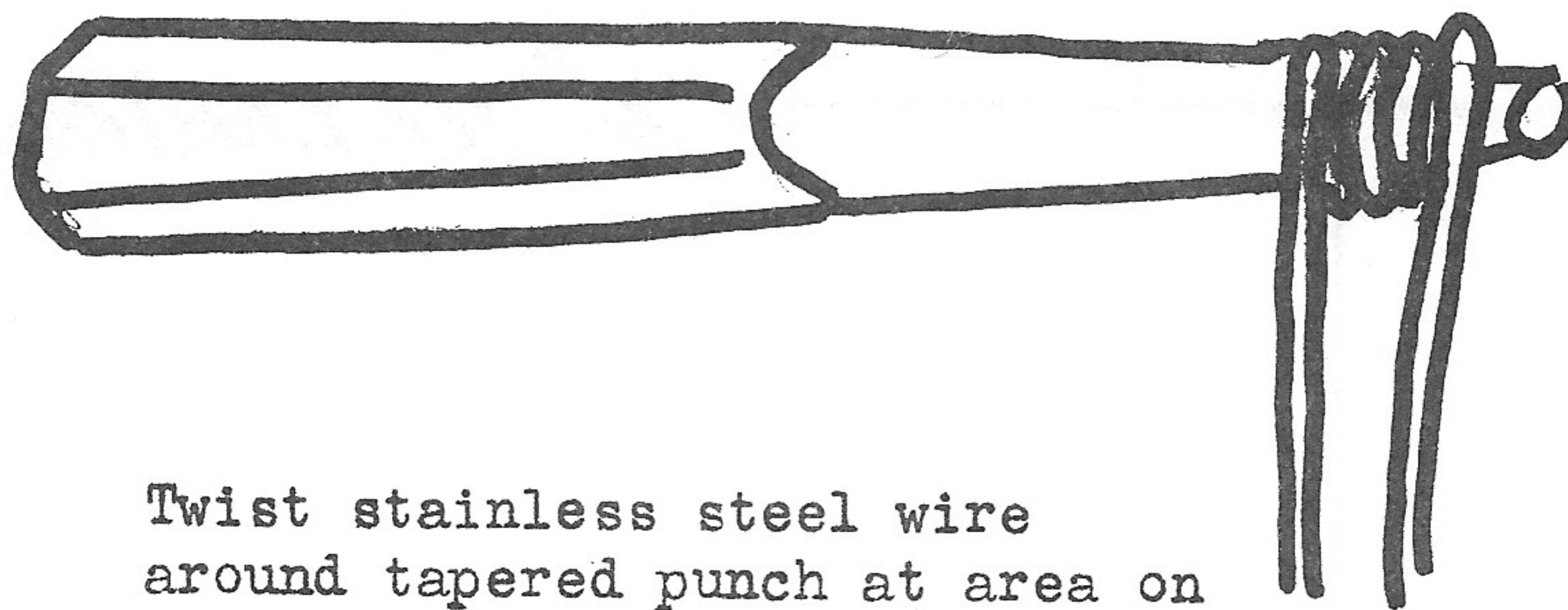
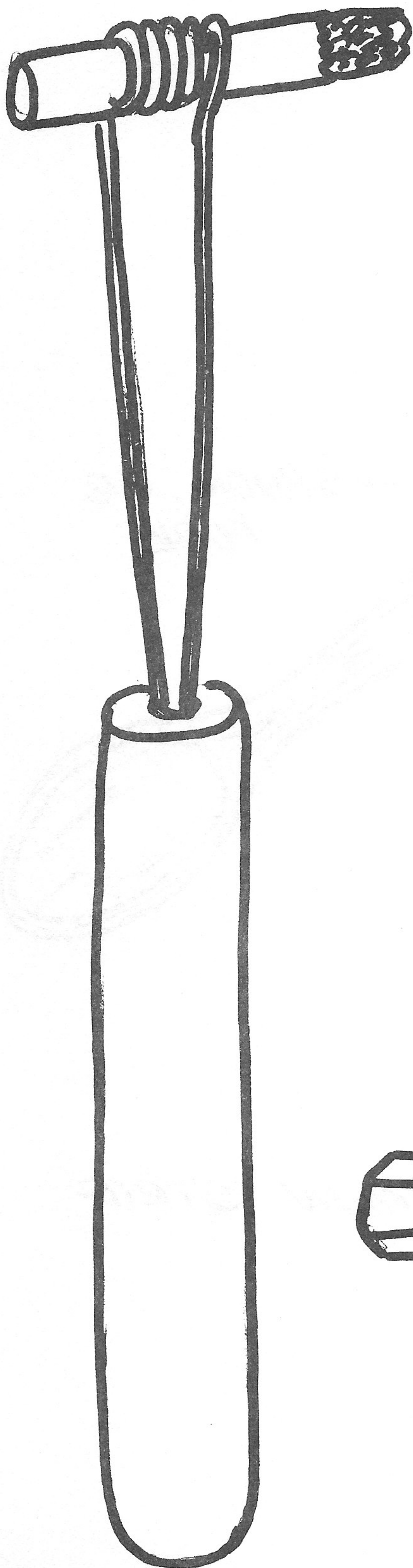
EXTENDED CIGARETTE HOLDER

PURPOSE

can be used where there is difficulty in grasping and holding small objects and also where there has been severe limitations of movement.

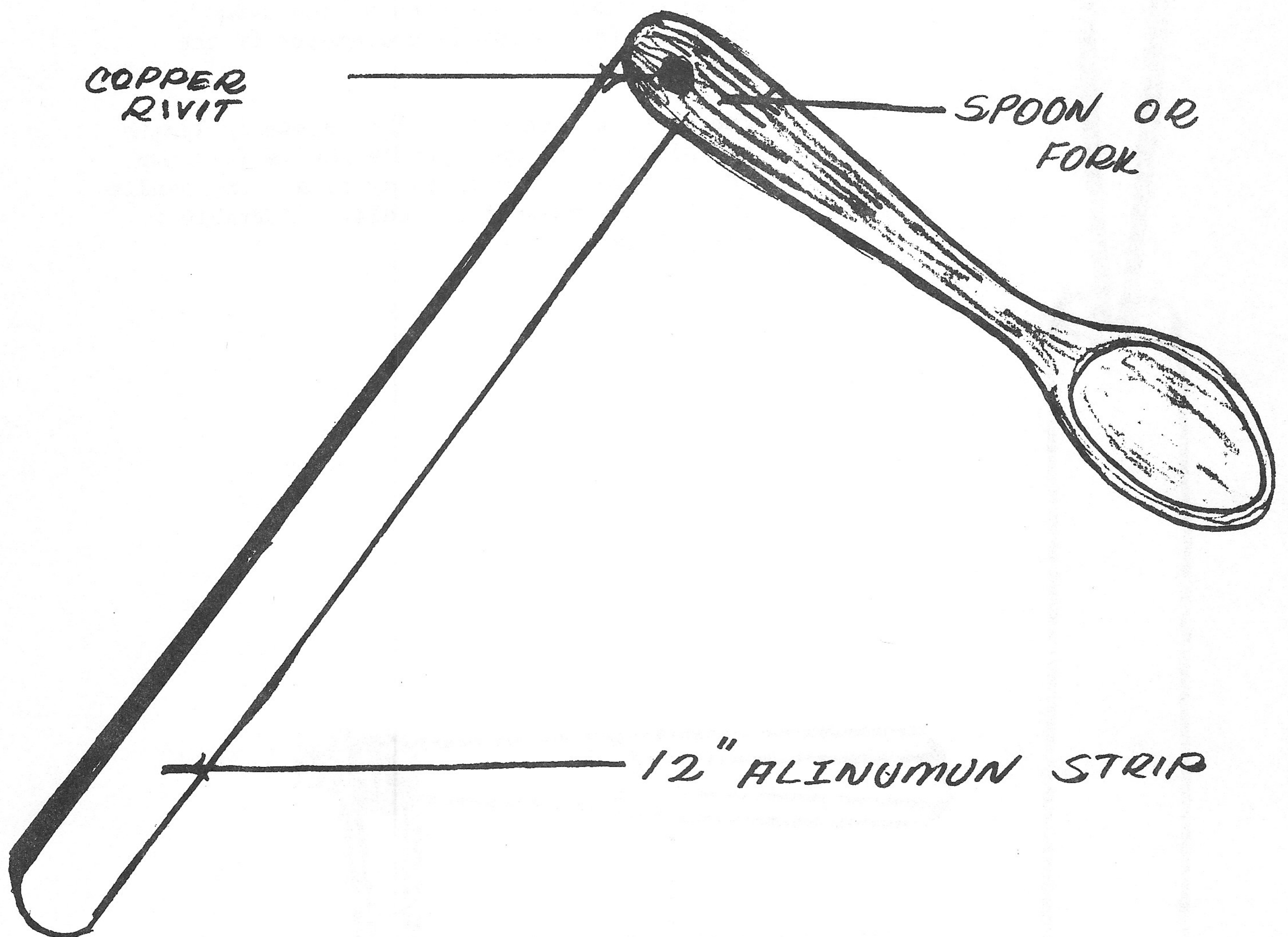
stainless steel wire is wrapped around a tapered punch at the area on the punch that has the approximate diameter of the cigarette.

The wire is then cut to the necessary length and glued in an appropriate handle (old mop or broom handle) with epoxy glue. The handle can be any length that feels comfortable to the patient.



Twist stainless steel wire around tapered punch at area on punch that has the approximate diameter of a cigarette.

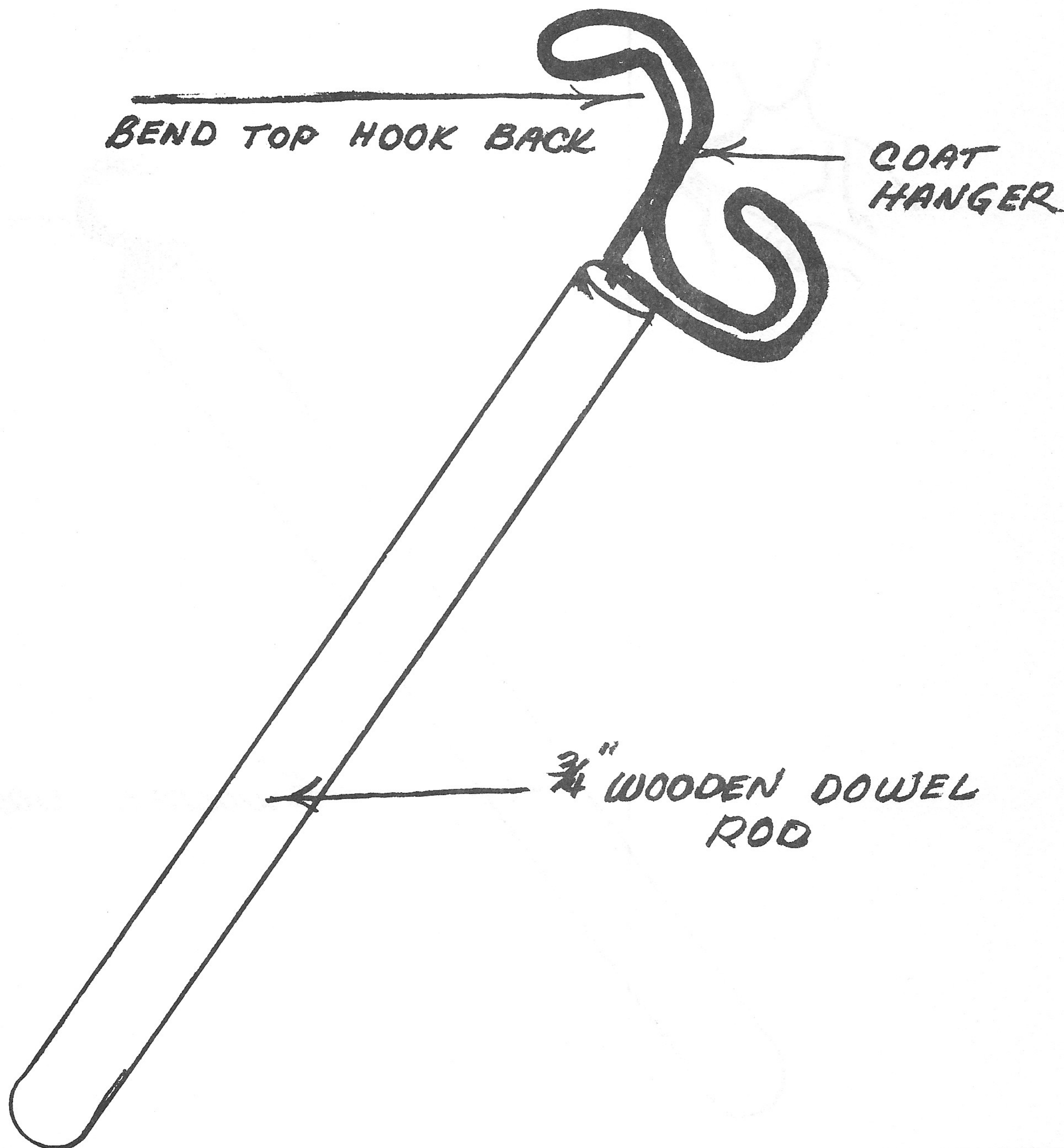
EXTENDED FORK OR SPOON



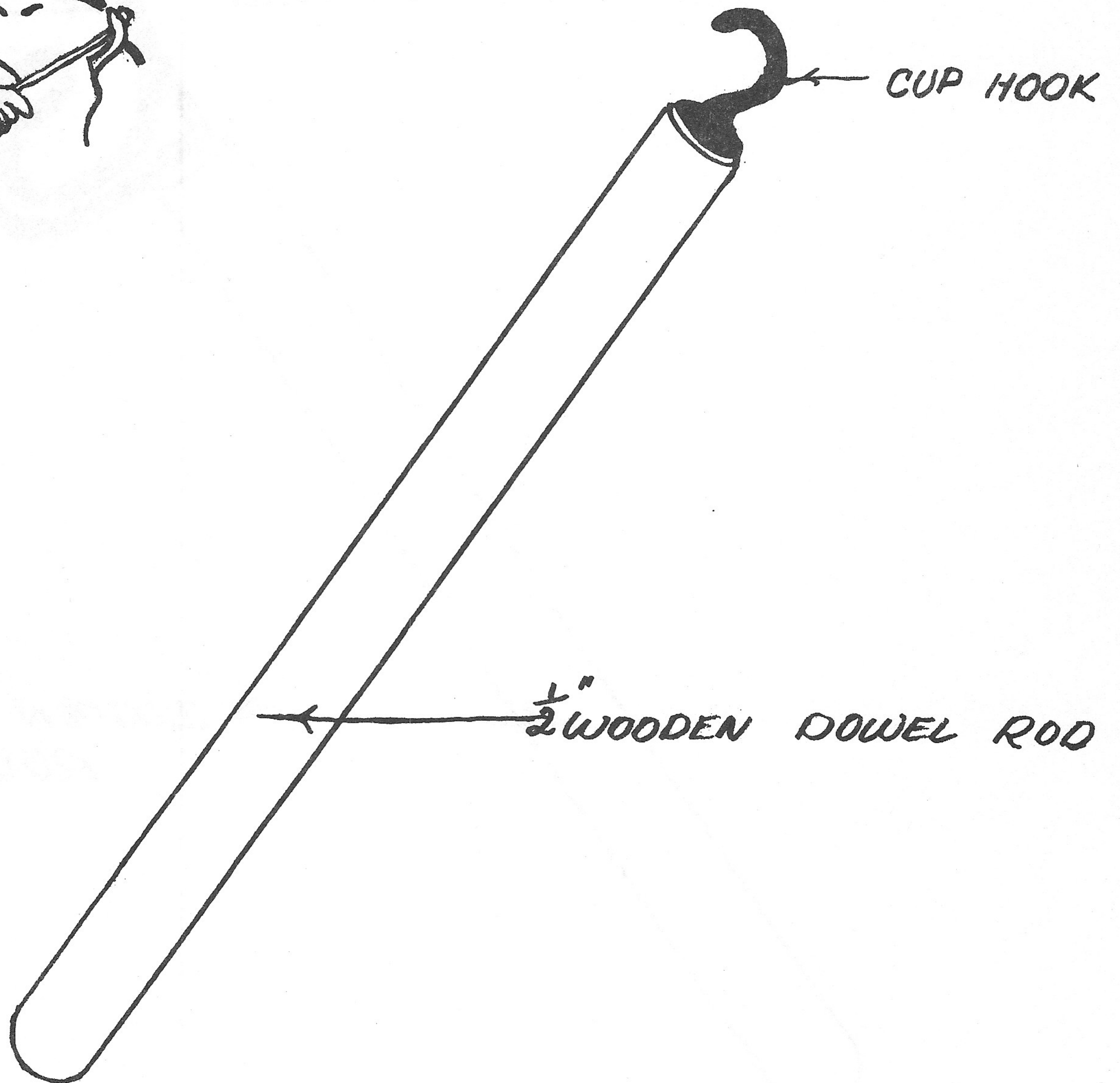
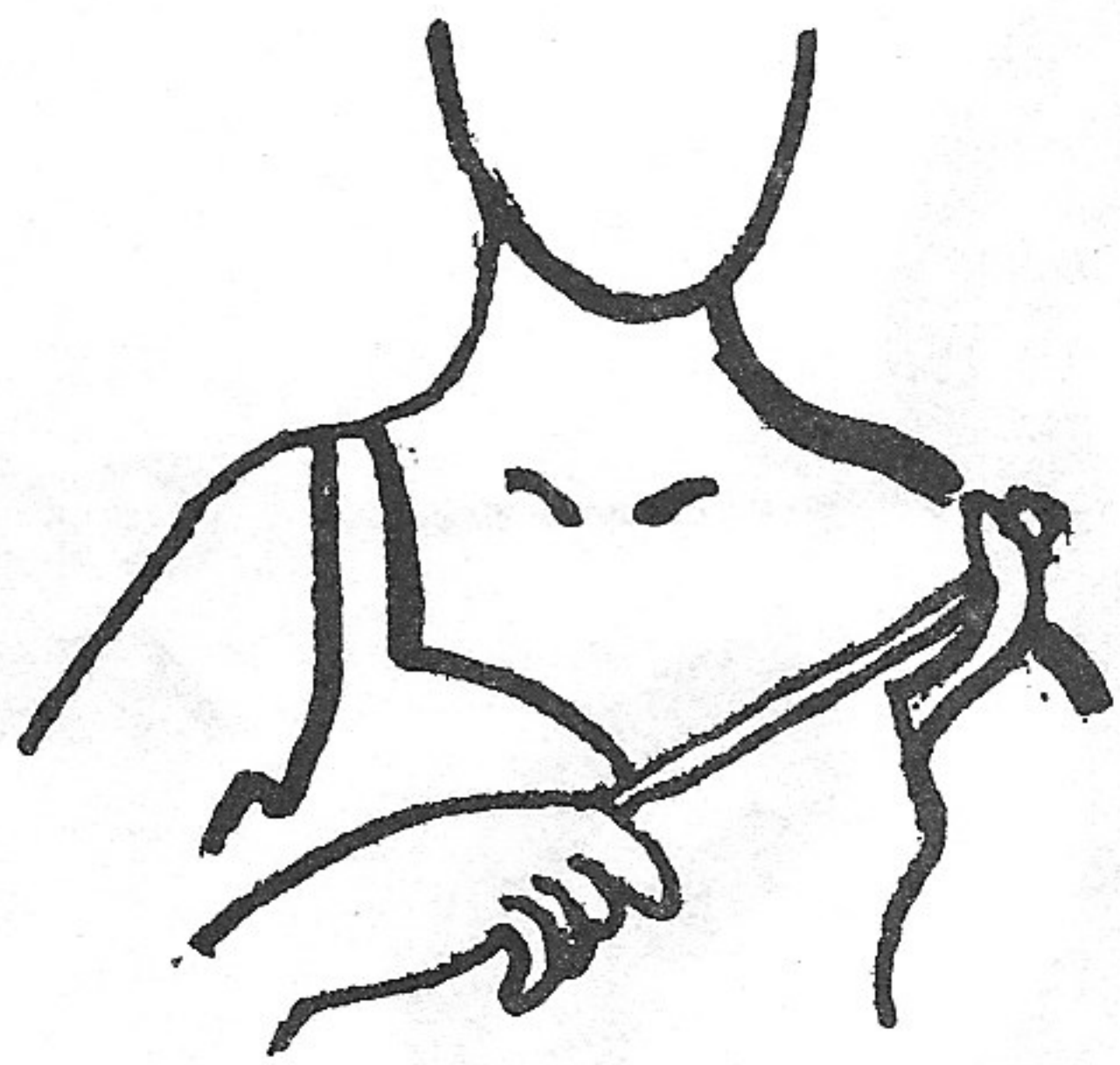
UTILITY STICK

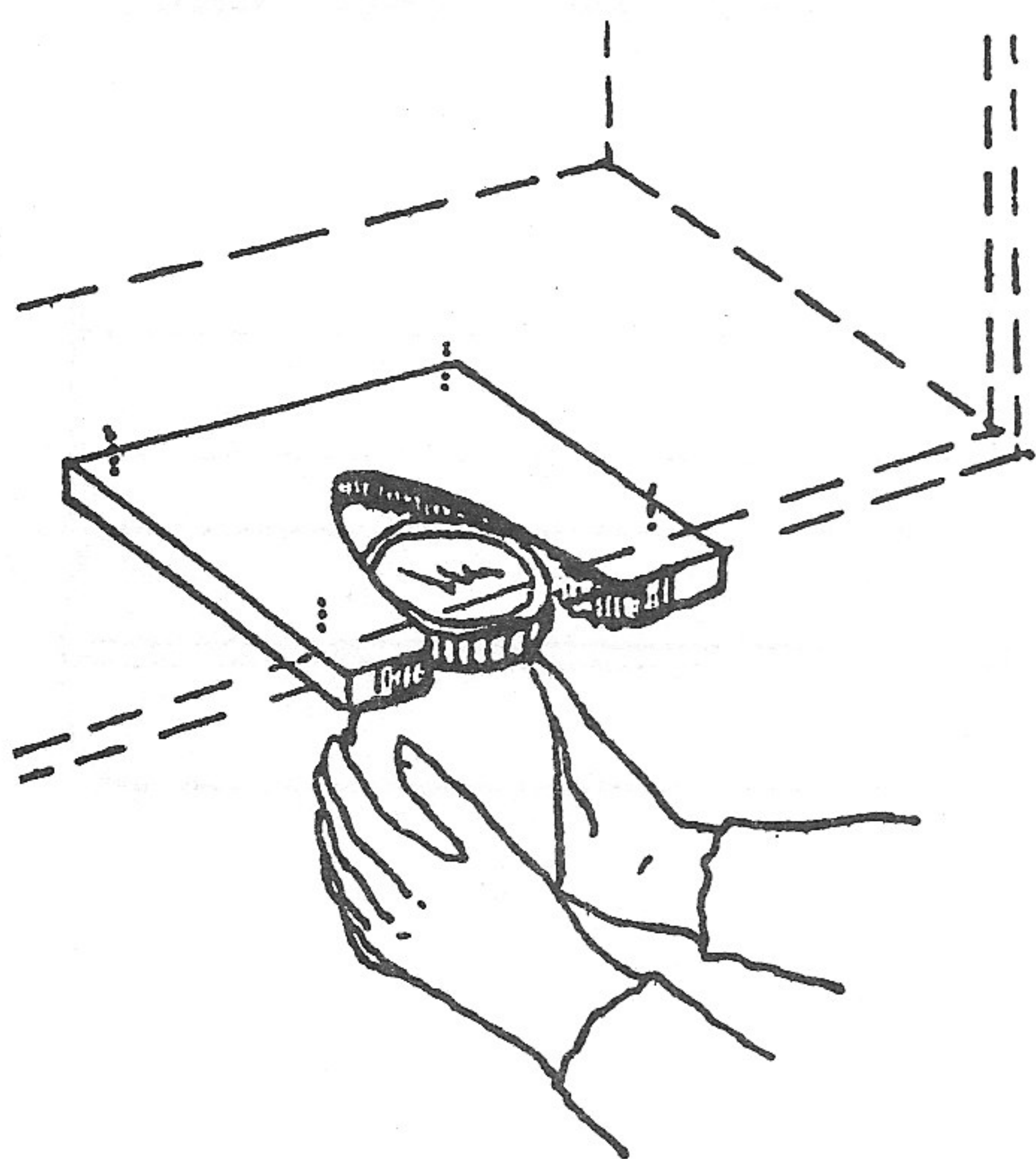
PURPOSE

This utility stick may be used for many purposes to extend the reach of patients that have severe loss of movement or fixations. It may be used to push or pull items, dressing, or to turn on and off faucets. There is practically no end to the used that this device may be used for.



HOMADE ZIPPER PULL OR DRESSING STICK



JAR OPENERPURPOSE:

To help turn jar lids when grip is weak or painful.

METHOD:

Attach opener under a cupboard, close to edge.

Wedge jar into slot and rotate with both hands.

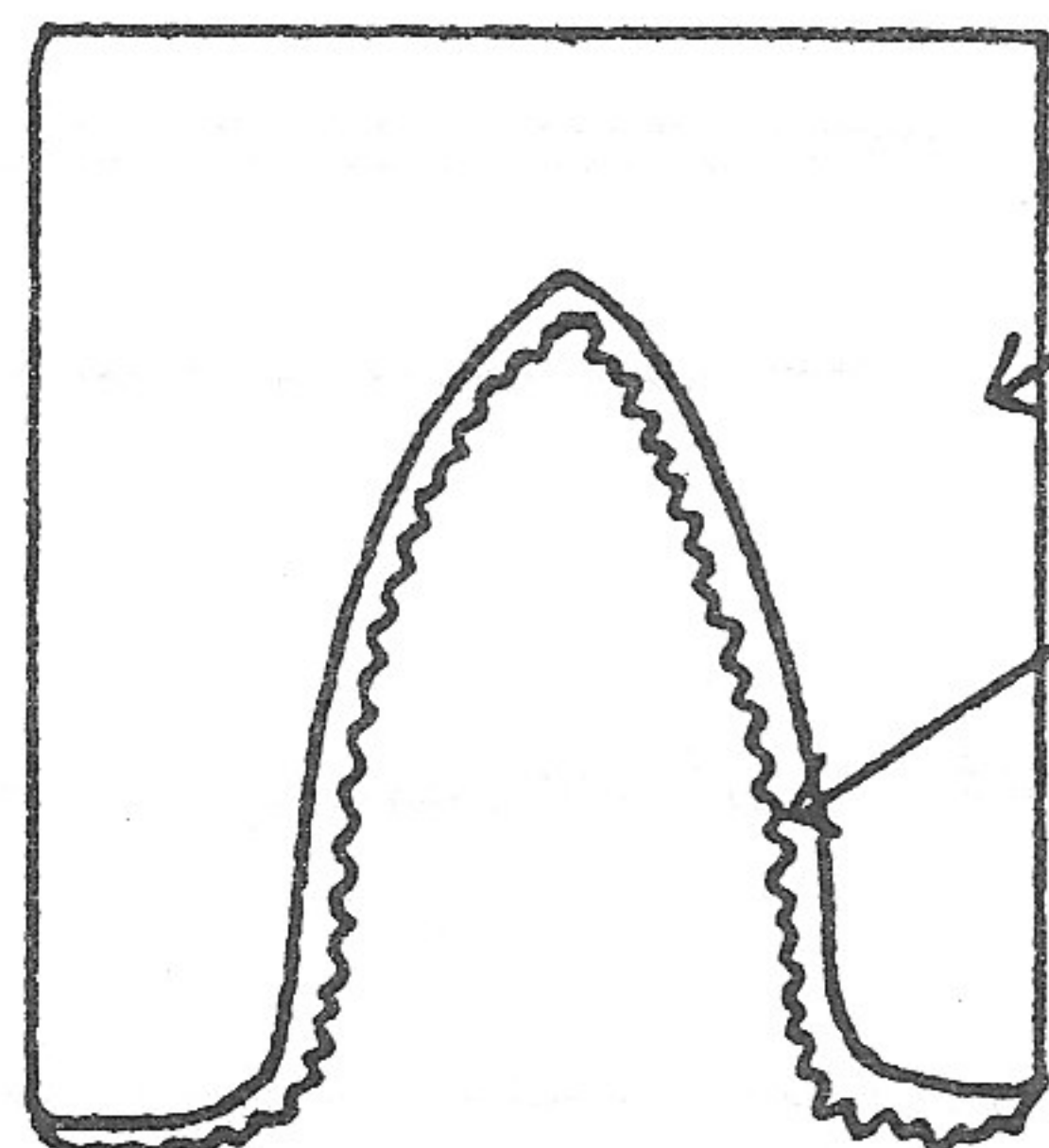
MATERIALS:

1" thick wood

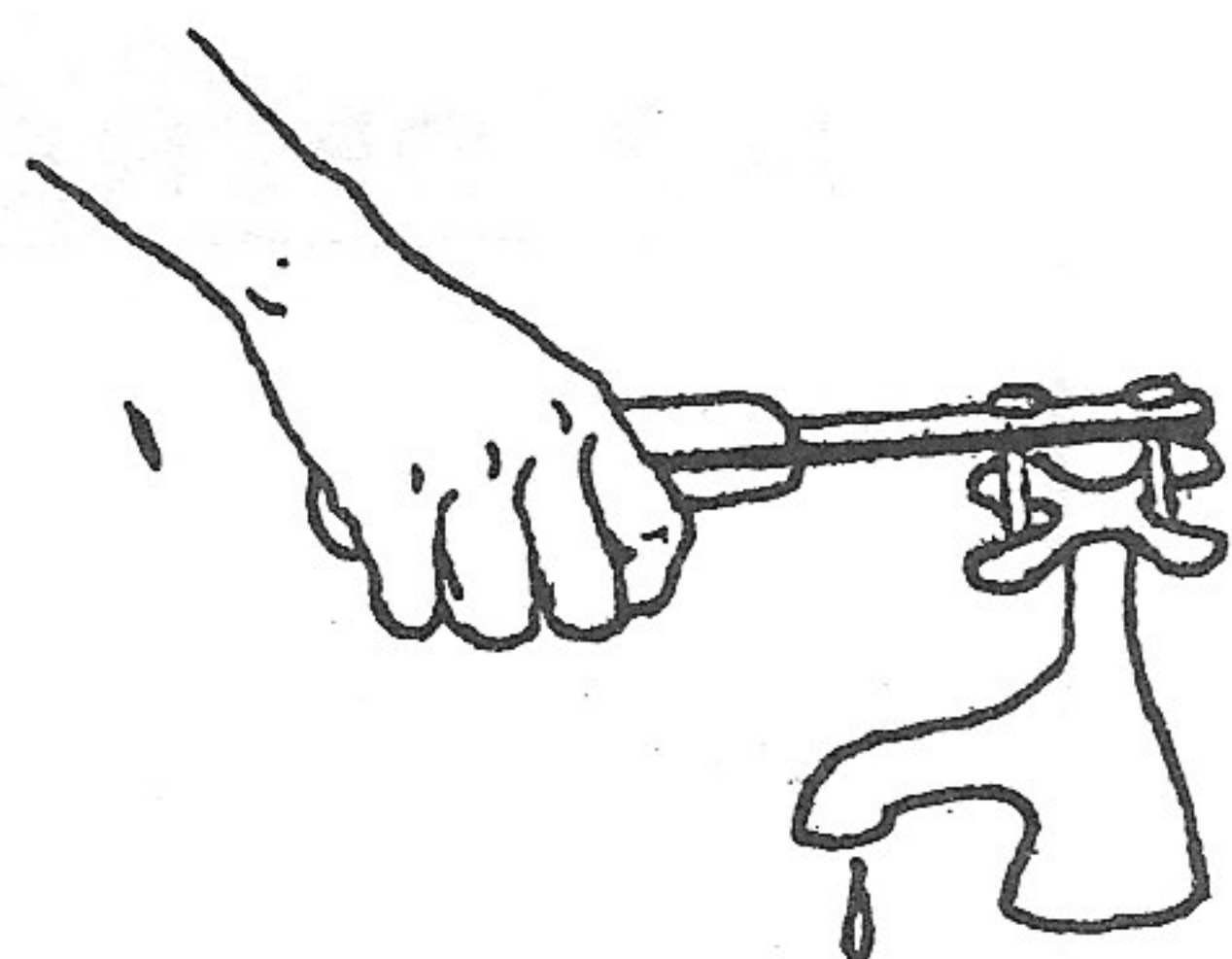
1" wide textured rubber, glued and nailed, (e.g. inner tube rubber, slashed so as to give traction).

OR:

Old hack-saw blade inserted into left side of wood, to grip lids; emery paper on other side.

ALTERNATIVES:

1. Square of textured sheet rubber (also useful for door handles).
2. Commercial types which avoid stress on joints of fingers.



TAP TURNER

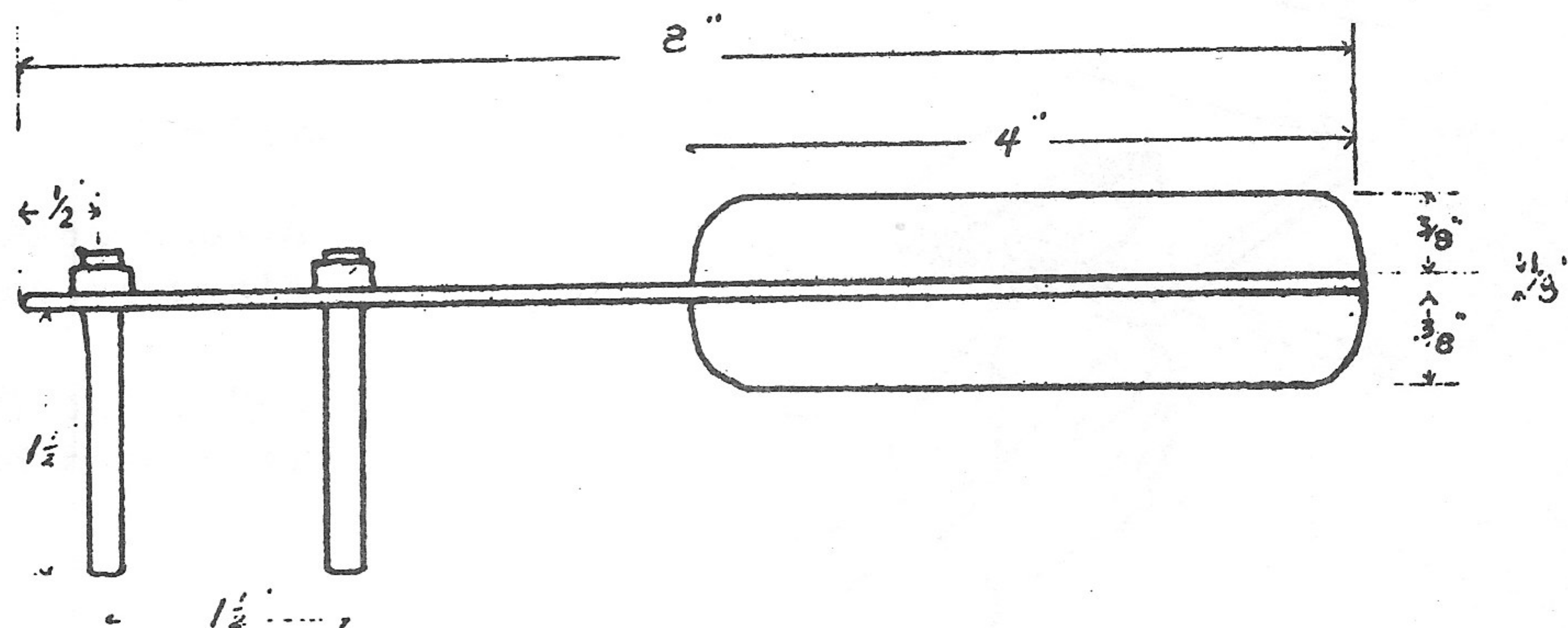
(ADJUSTABLE)

PURPOSE:

To lessen the strain on fingers and wrist in turning tap; to give leverage for weak hand.

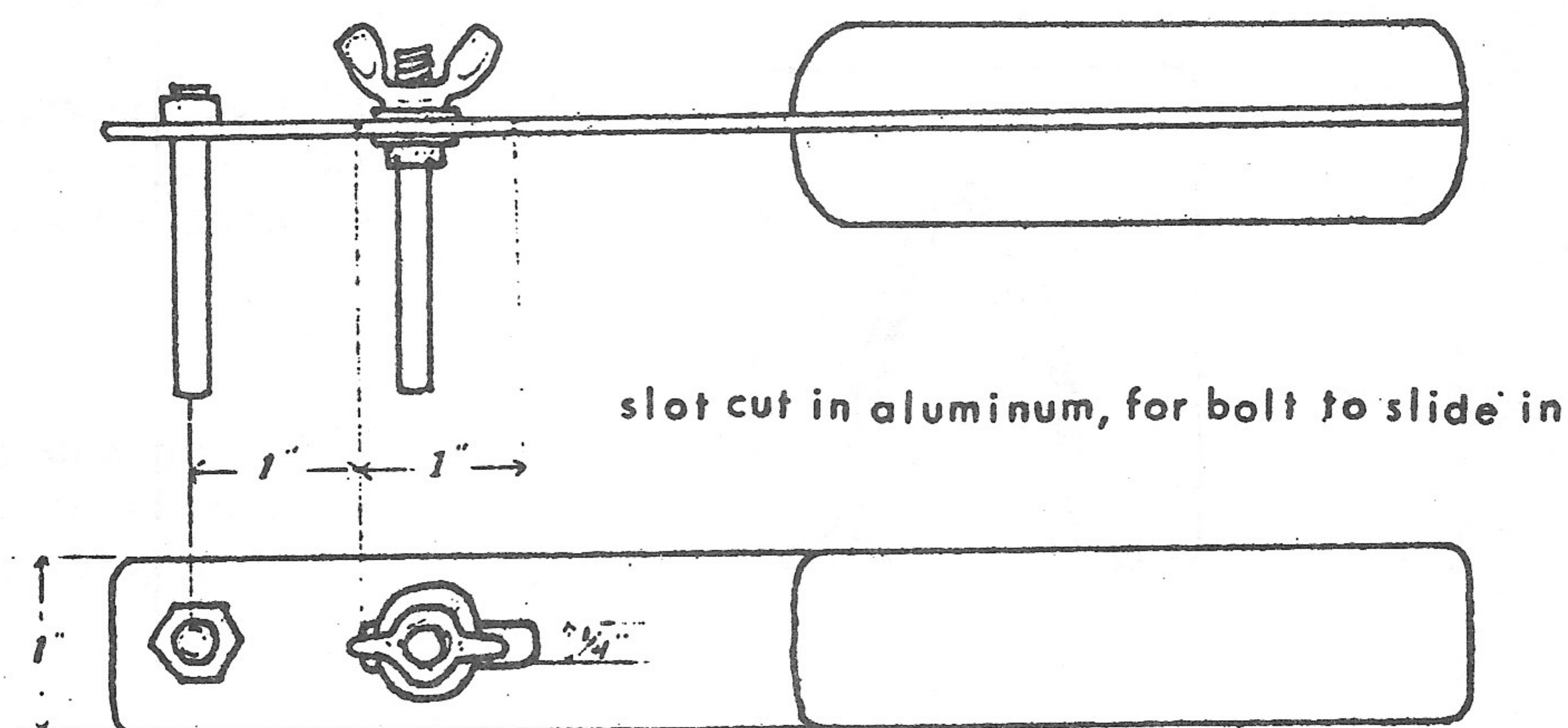
STANDARD:

Suitable for 4-pronged  taps.



ADJUSTABLE:

Better for 2-pronged  taps. May be fitted to tap, then tightened with pliers.



SIDE

TOP

MATERIALS:

8" of 1/8" x 1" aluminum 65 ST 6 bar (firm).

2 of 1/2" x 2" carriage bolts,
(head sawn off, with only last 1/2" threaded;
3/4" threaded for one if for adjustable type.)

2 of 1/2" nuts.

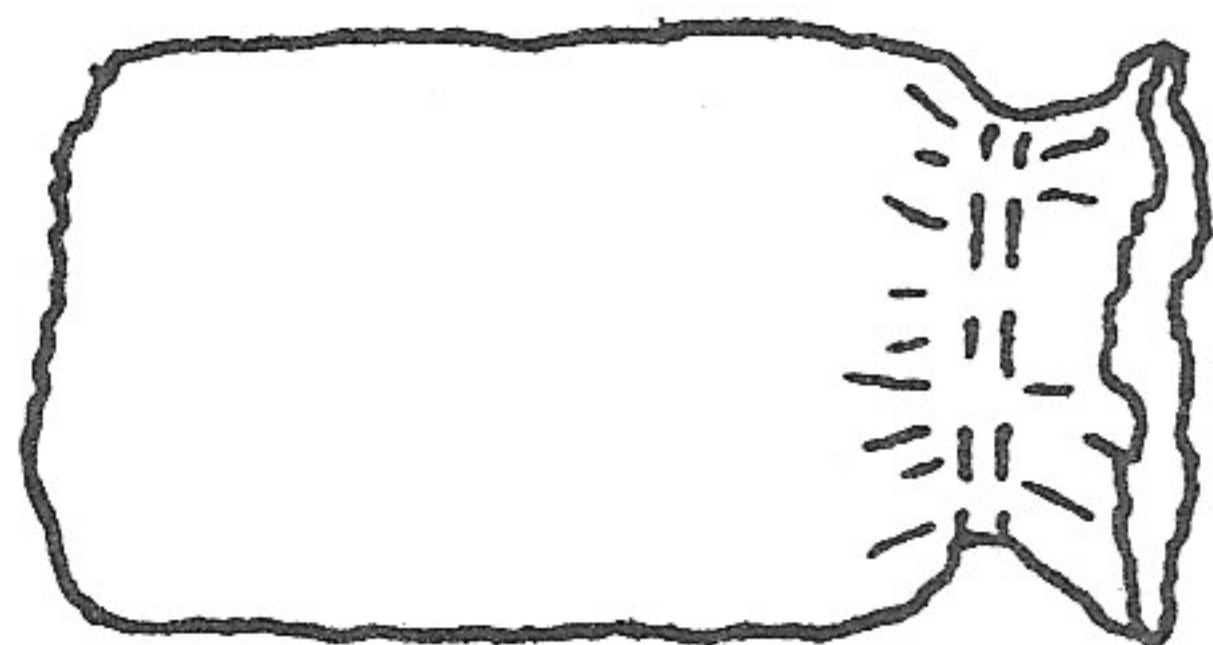
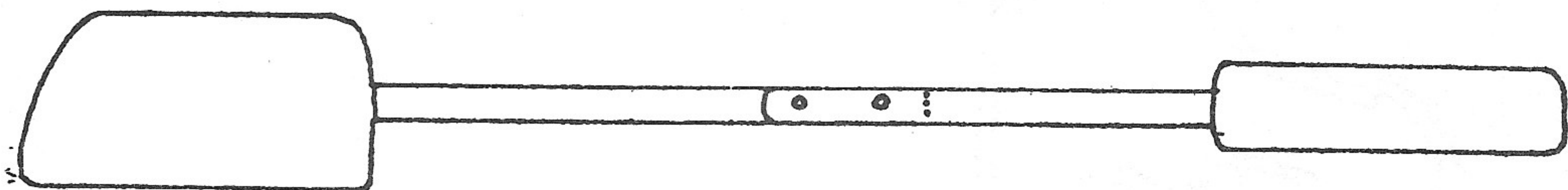
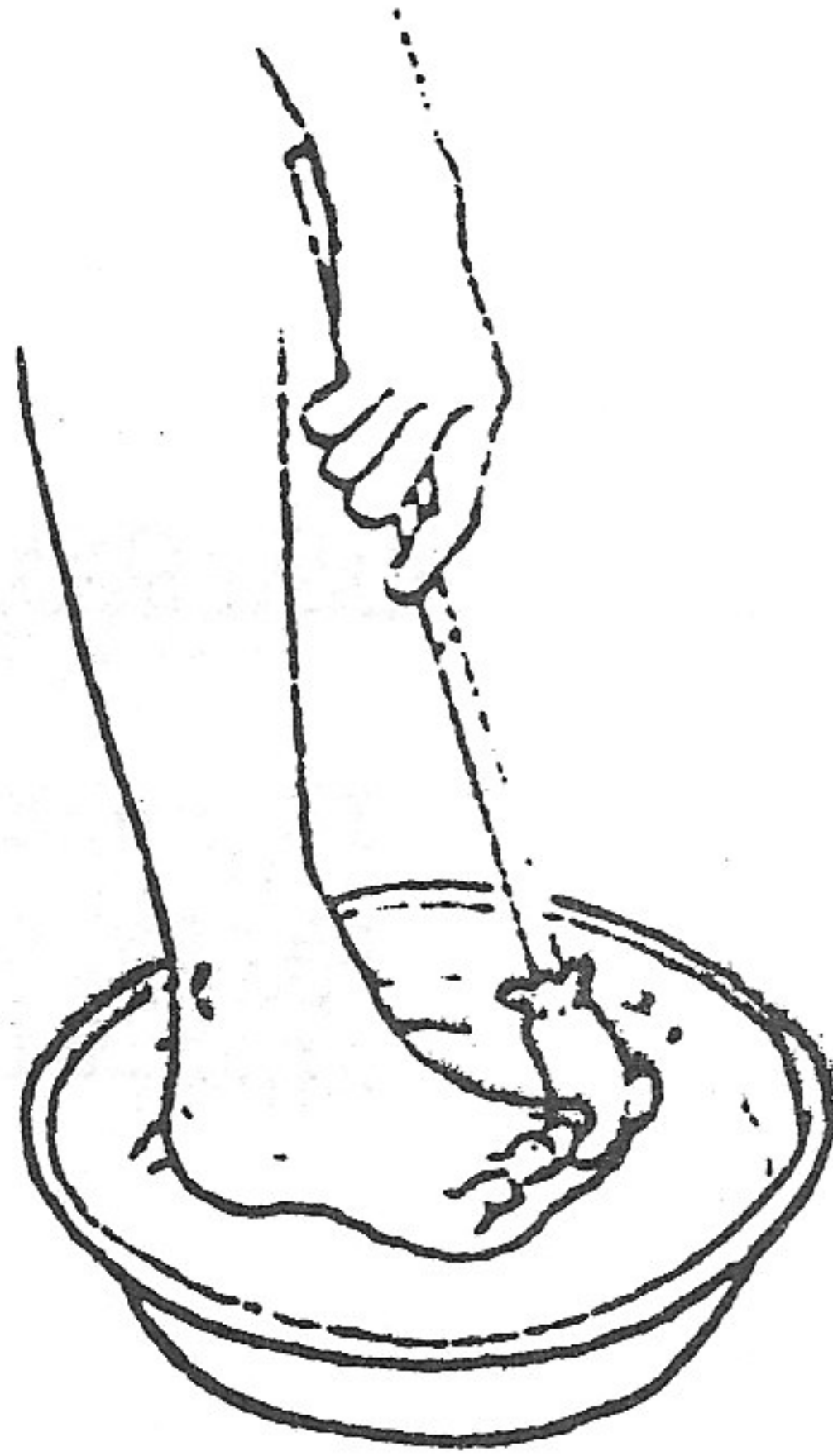
2 of 3/8" x 1" wood, 4" long.

1 of 1/2" wing nut)
2 of 1/2" washers) For adjustable type.

LONG-HANDLED TOE WASHER & DRIER

PURPOSE:

To allow independent bathing of feet when reach is restricted.



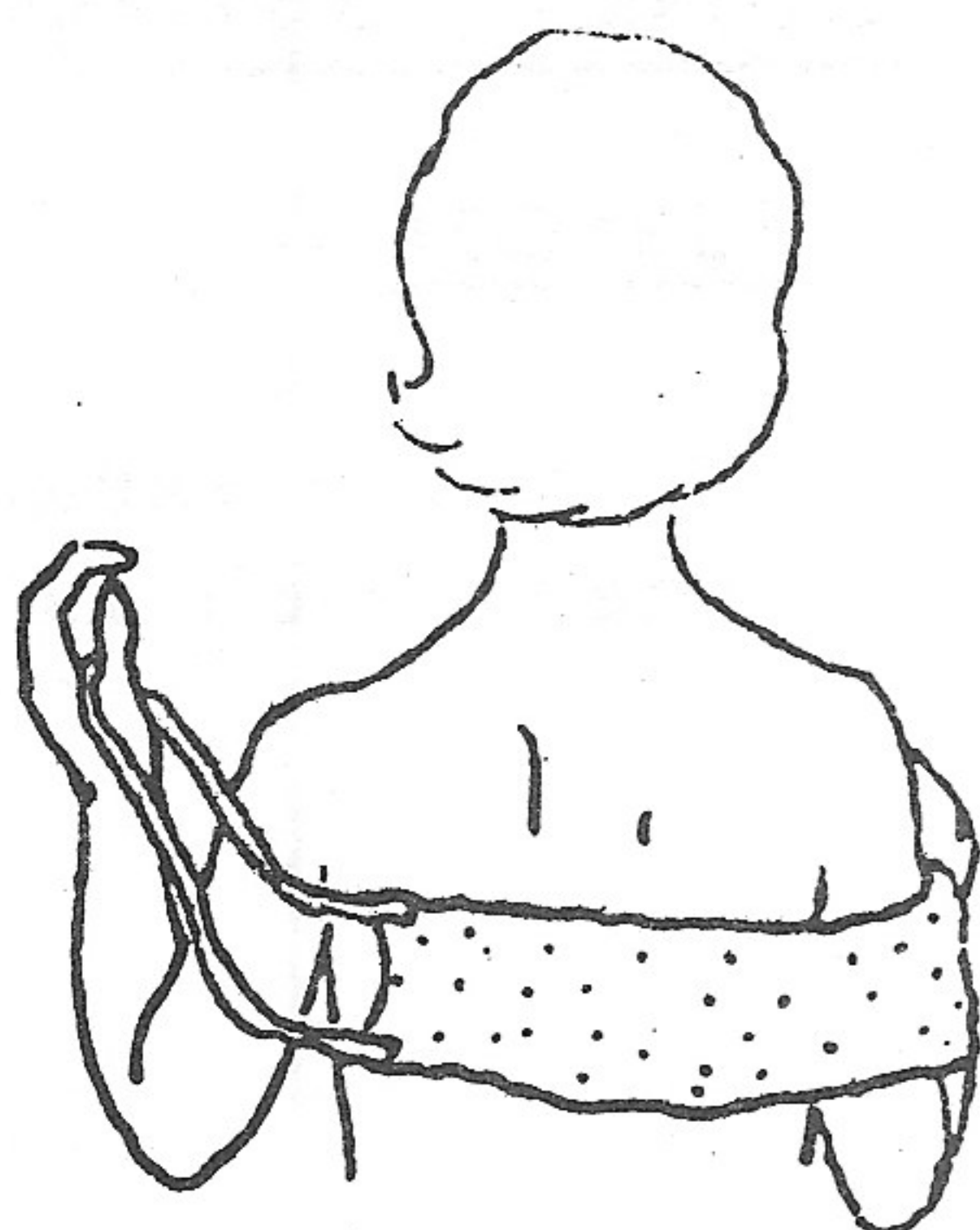
terry toweling
slip-cover

MATERIALS:

- 1 rubber or plastic bowl scraper or facsimile.
- 1 piece of aluminum (65 ST 6 bar) or equivalent, to lengthen scraper.
- 2 pieces of wood, 3/8" x 1" x 4" for handle.
- 2 pieces of terry toweling 5" x 5" for slip-covers, (1 for washing, 1 for drying), with elastic or velcro around top.

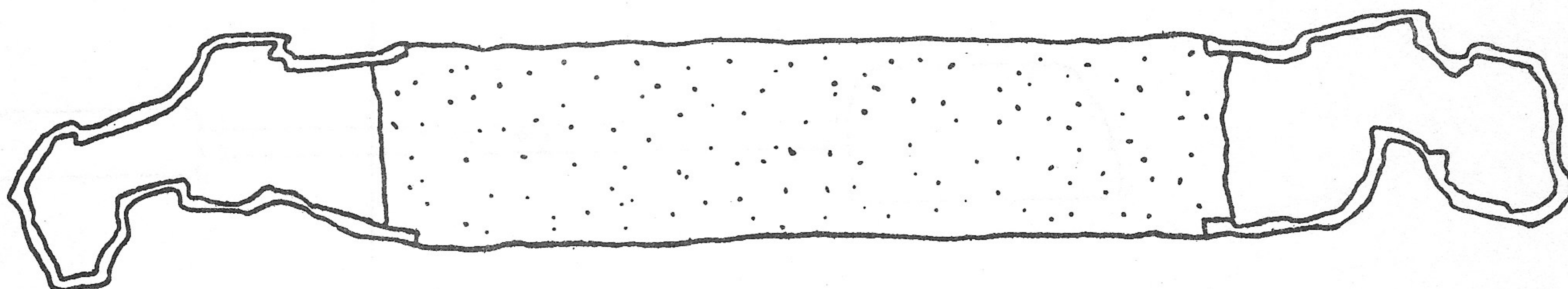
CANADIAN ARTHRITIS SOCIETY

SLING TOWEL



PURPOSE:

To enable drying of back and other parts of body when limited reach prohibits.



MATERIALS:

36" x 18" terry toweling

2 pieces of 22" x $\frac{1}{2}$ " nylon tape

CONSTRUCTION:

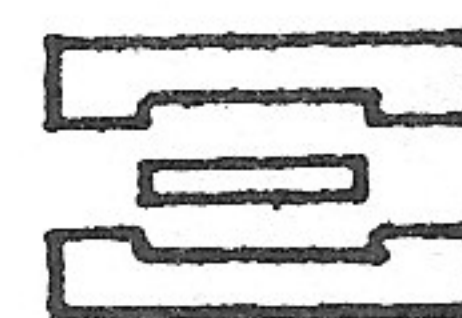
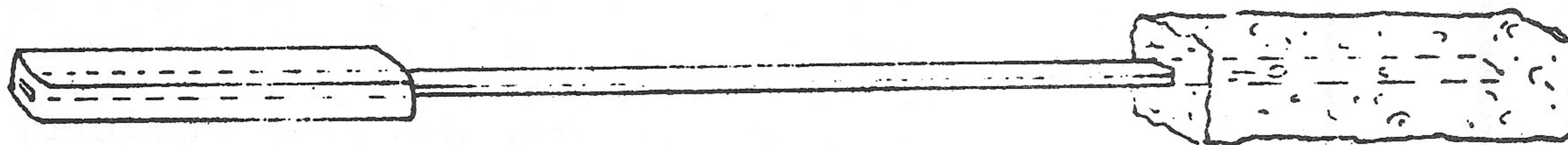
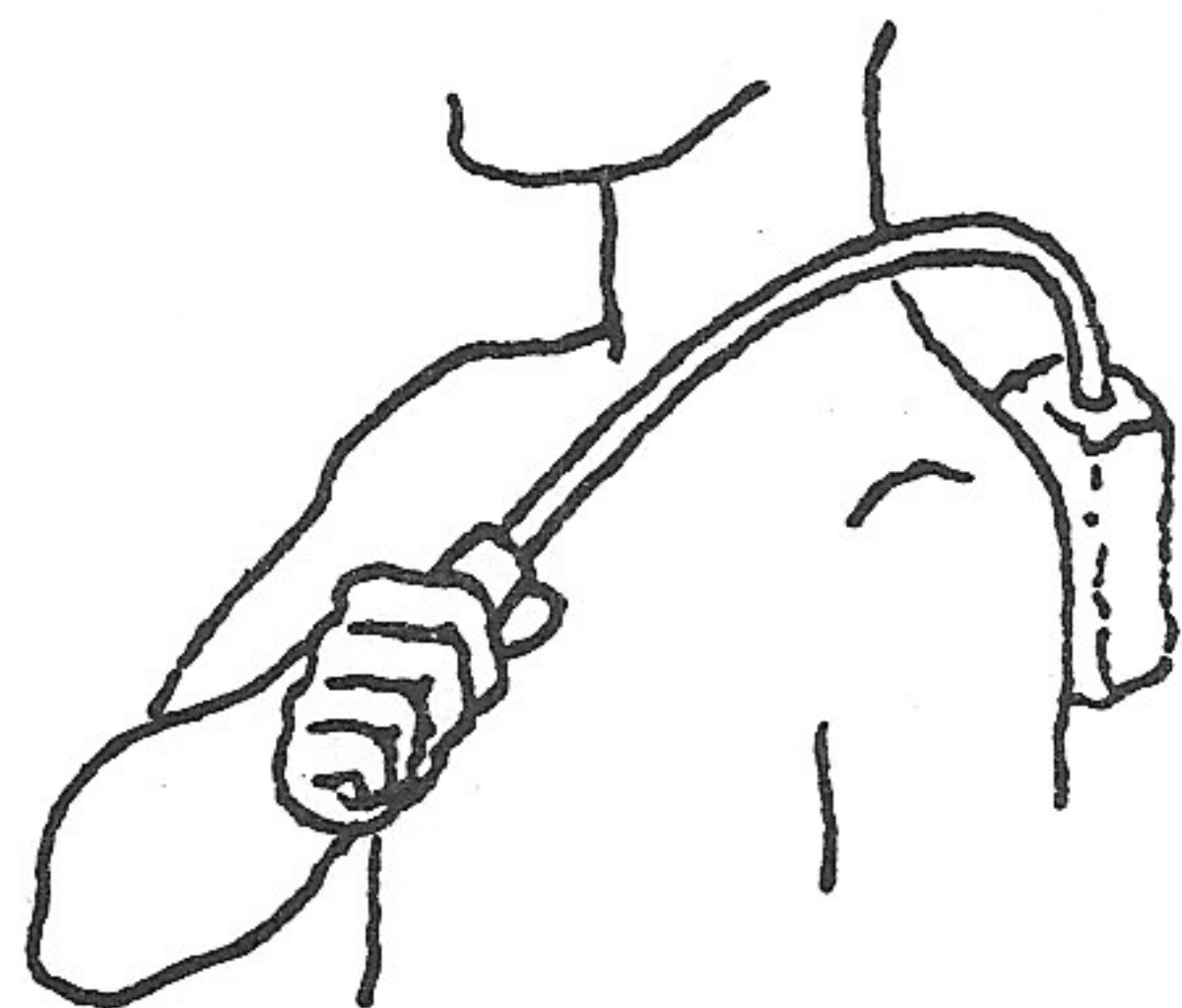
1. Fold terry toweling lengthwise.
2. Stitch around 3 edges; turn inside out and stitch remaining end with edges turned under.
3. Attach tapes securely to ends, as shown.

CANADIAN ARTHRITIS SOCIETY

LONG-HANDLED SPONGE

PURPOSE:

To aid in washing back and wherever hands cannot reach when range is restricted.



CONSTRUCTION:

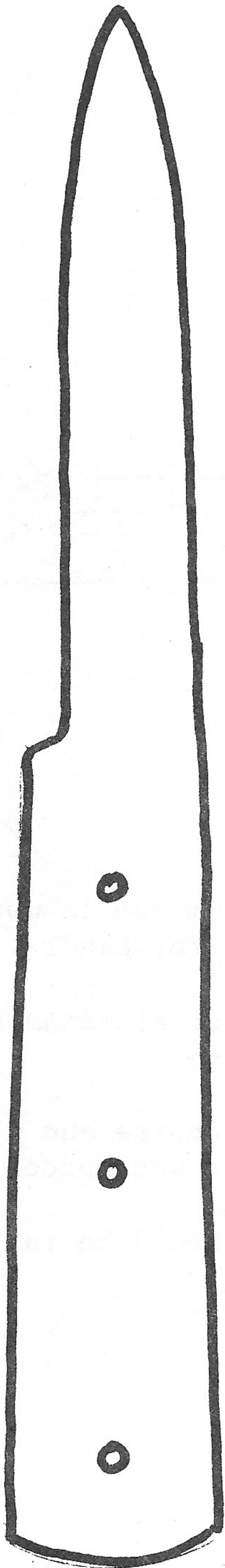
MATERIALS:

- 2 of 4" lengths of 3/8" x 1" wood.
- 1/2" x 1/8" soft aluminum 50 ST 6
in length desired, e.g. 18", 24".
- 2" x 3" x 5" sponge (if sponge is
too big it weighs too much when
saturated).

1. Cut groove for aluminum in wood,
and glue together for handle.
2. Smooth other end of aluminum so
it won't cut sponge.
3. Split sponge lengthwise and glue
onto aluminum with waterproof
glue.
End of aluminum should be in 1"
from end of sponge.

CANADIAN ARTHRITIS SOCIETY

EXPANDED HANDLE KITCHEN KNIVES



ACTUAL
SIZE PARING
KNIFE BLADE

One of the easiest blades to put a larger handle on is blades of this type. The blades come from the factory with holes already punched in the handle and the blade needs only a very little bit of additional sharpening when completed.

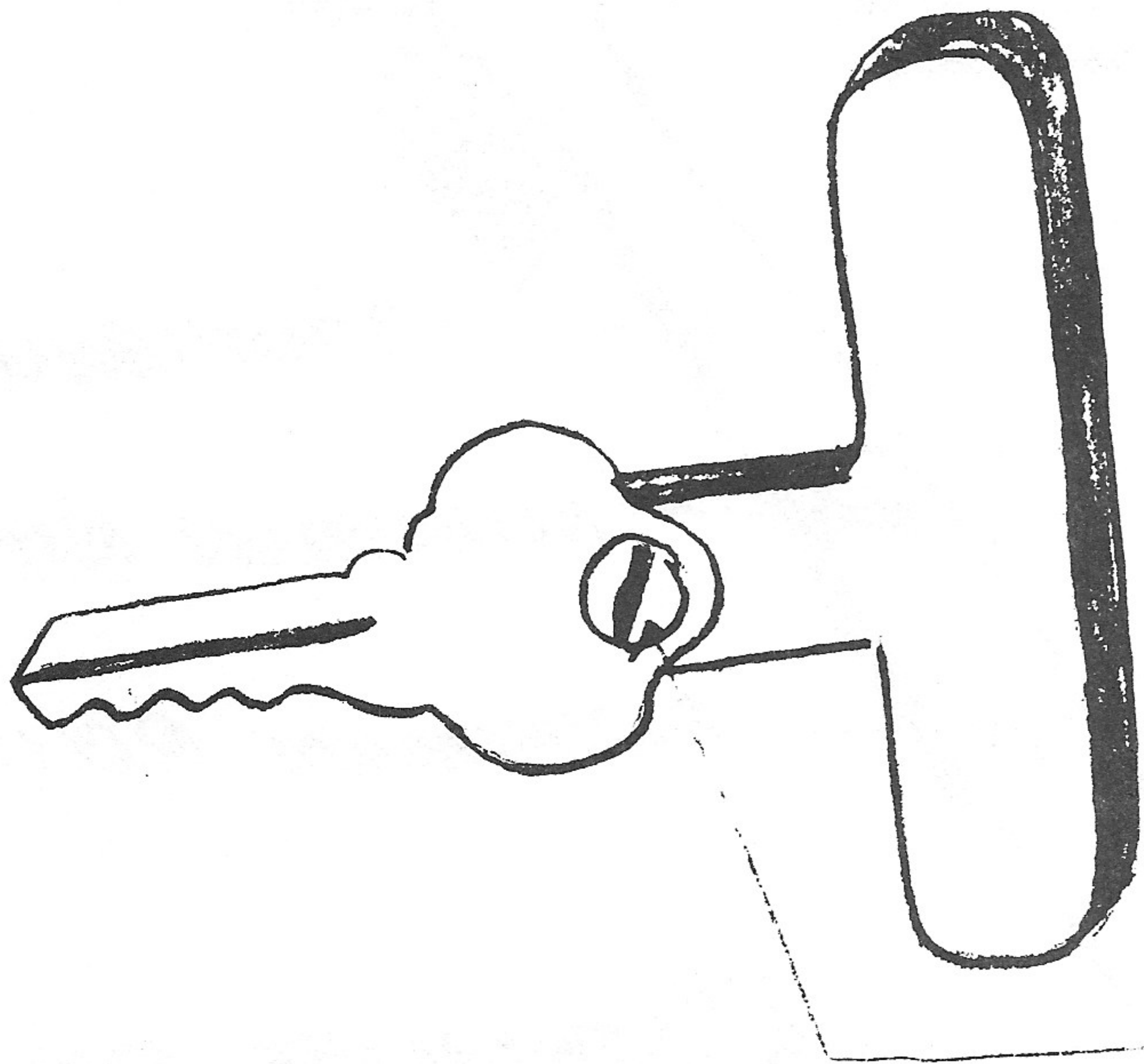
the blade shown here is a paring knife blade. The company that we have purchased these blades from has a complete line of kitchen knives in this pattern. They also carry a complete line of Sheffield Steel hunting and sporting blades which come without the handles being installed.

If you will write the distributor of these knives on Arthritis Foundation Stationary they will give you a 40 percent discount off the list price.

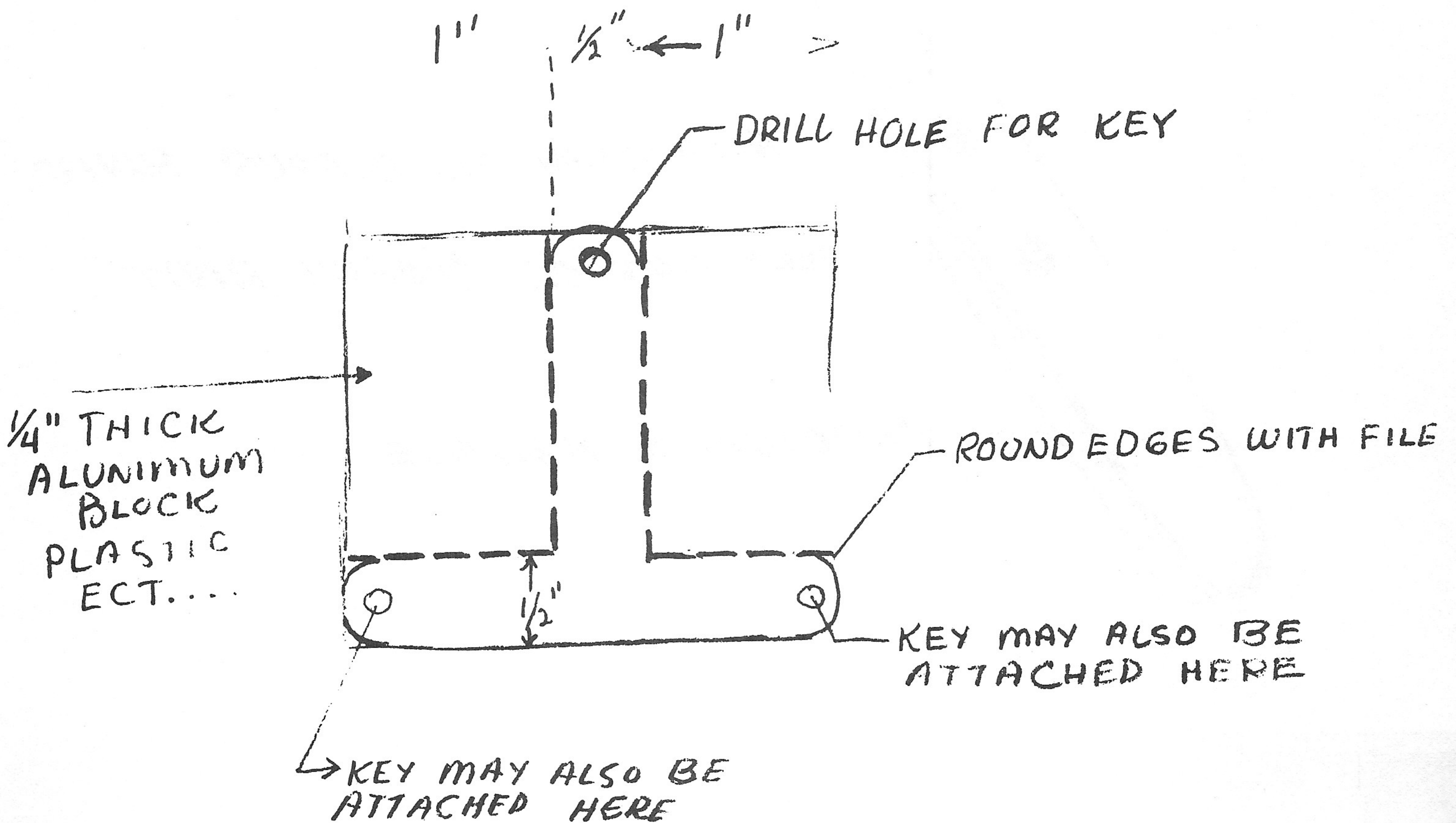
The name and address of the supplier is as follows:

Indian Ridge Traders
Post Office Box 20039
Ferndale Michigan 48220

KEY T



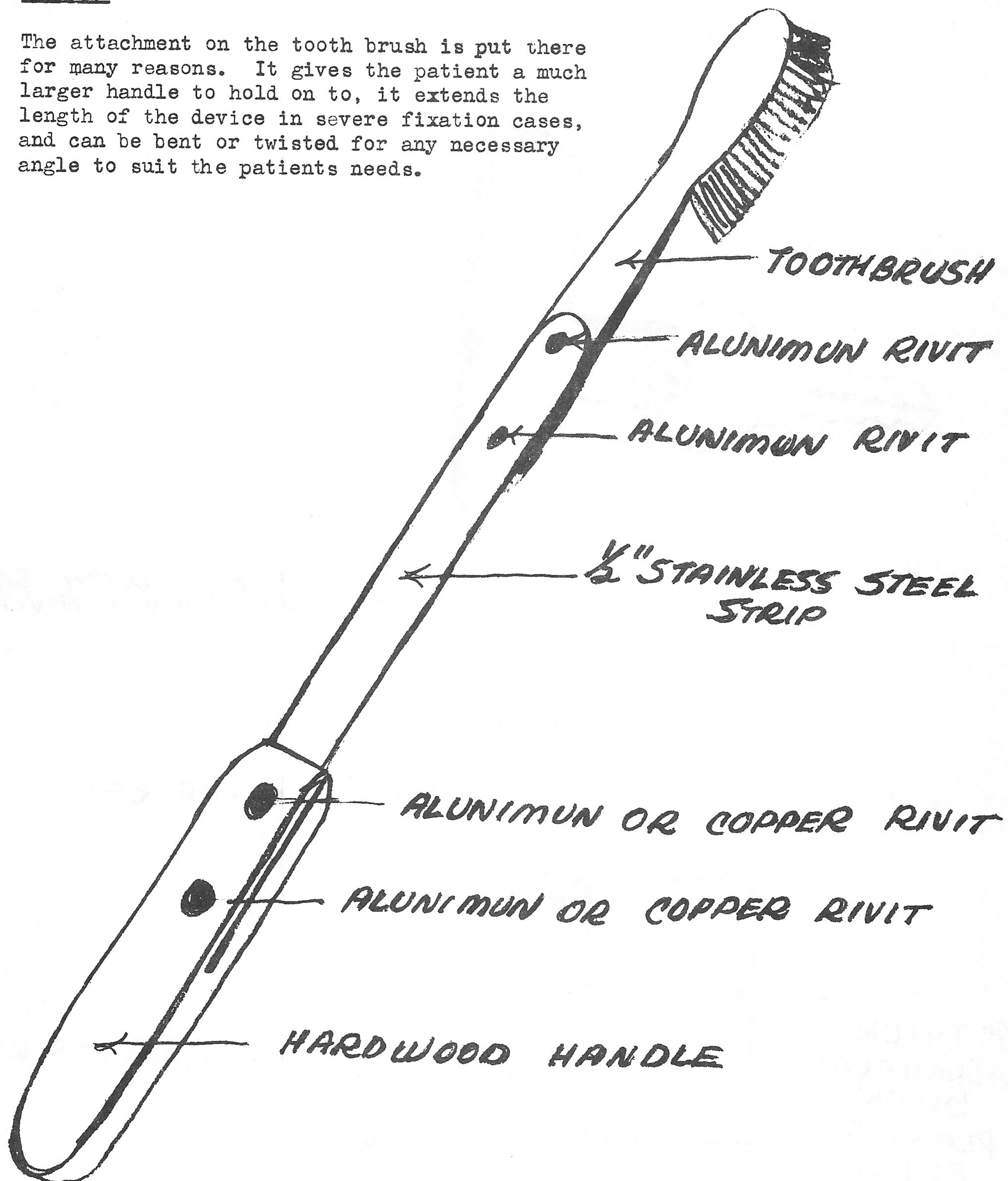
ATTACH KEY WITH SMALL BOLT OR COPPER RIVET.



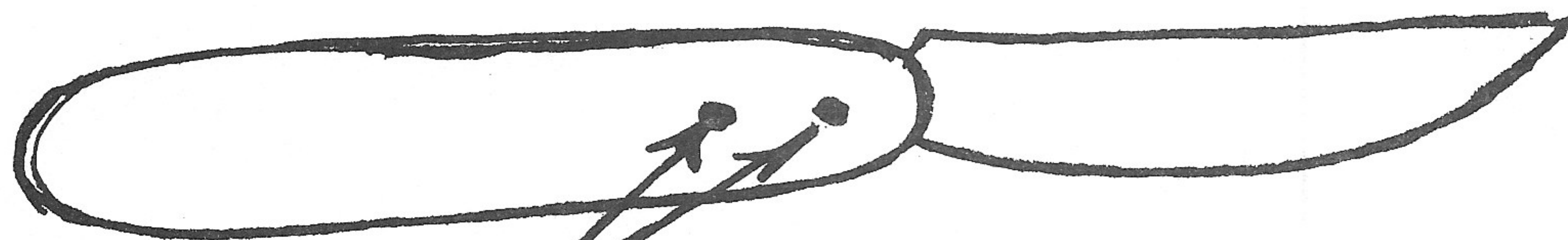
EXTENDED TOOTHBRUSH

PURPOSE

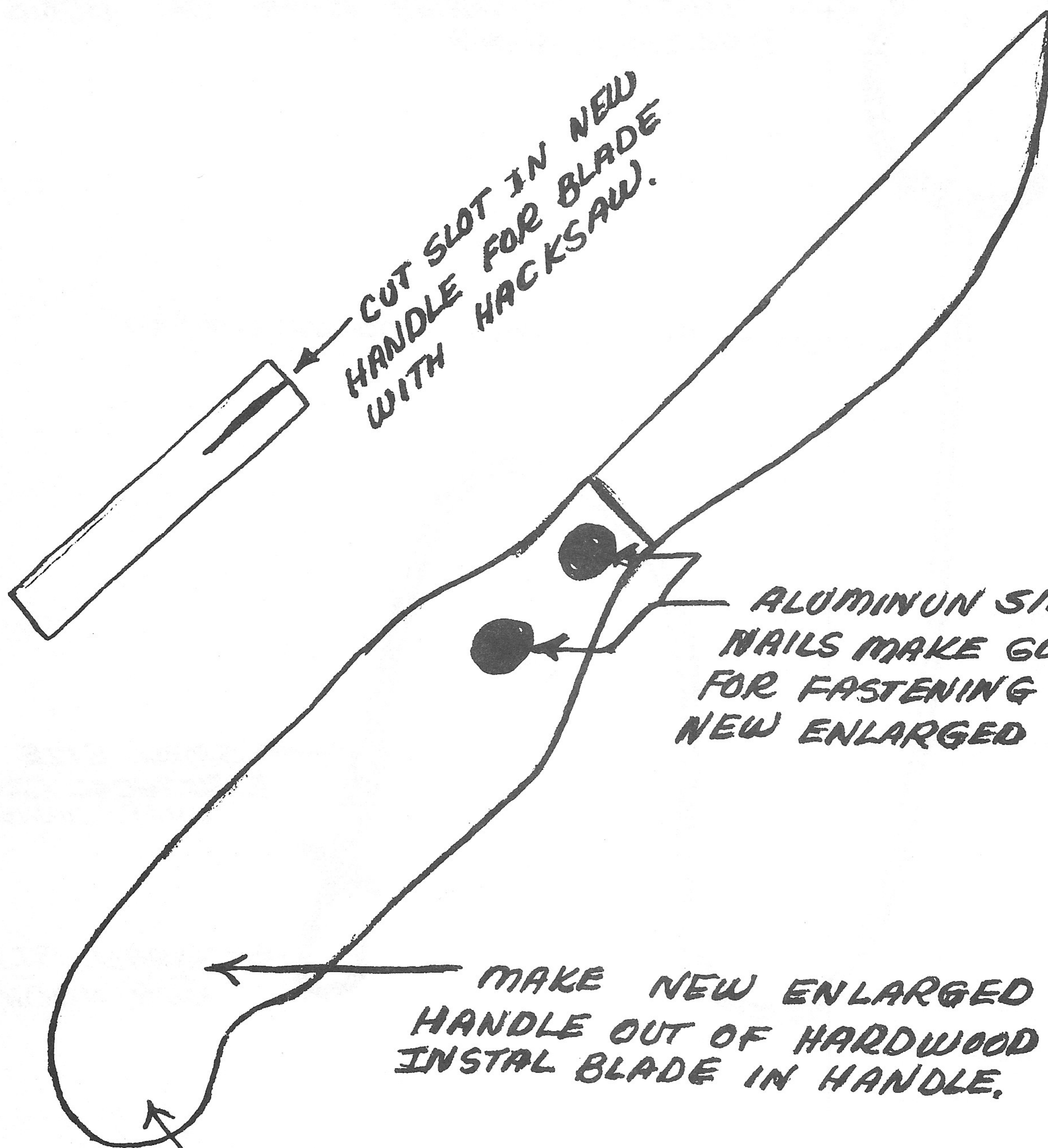
The attachment on the tooth brush is put there for many reasons. It gives the patient a much larger handle to hold on to, it extends the length of the device in severe fixation cases, and can be bent or twisted for any necessary angle to suit the patients needs.



ENLARGED HANDLE PARING KNIFE



FILE OFF RIVETS OF PARING KNIFE
AND REMOVE BLADE FROM HANDLE.



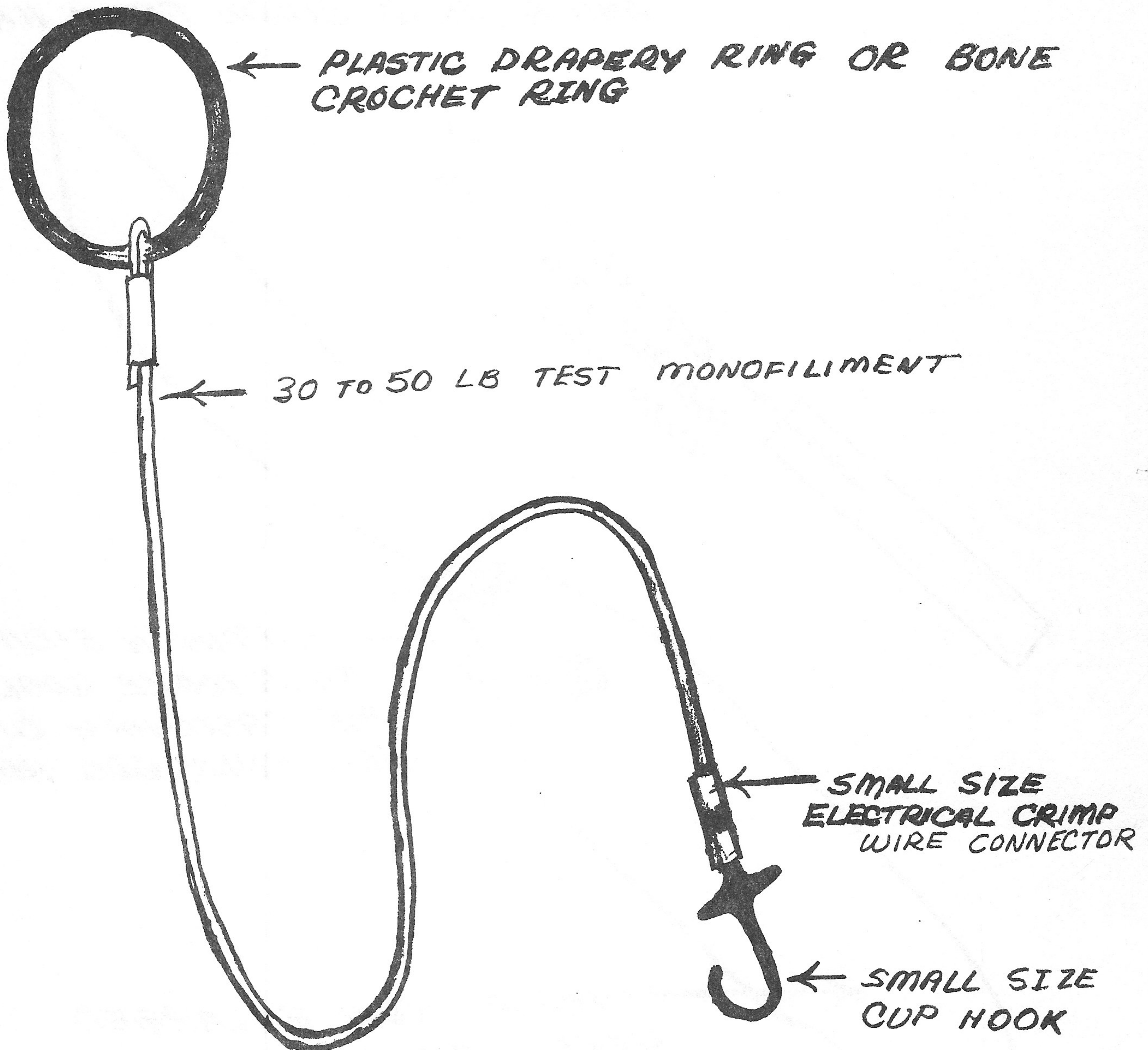
CUT SLOT IN NEW
HANDLE FOR BLADE
WITH HACKSAW.

ALUMINUM SIDING
NAILS MAKE GOOD RIVETS
FOR FASTENING ON
NEW ENLARGED HANDLE

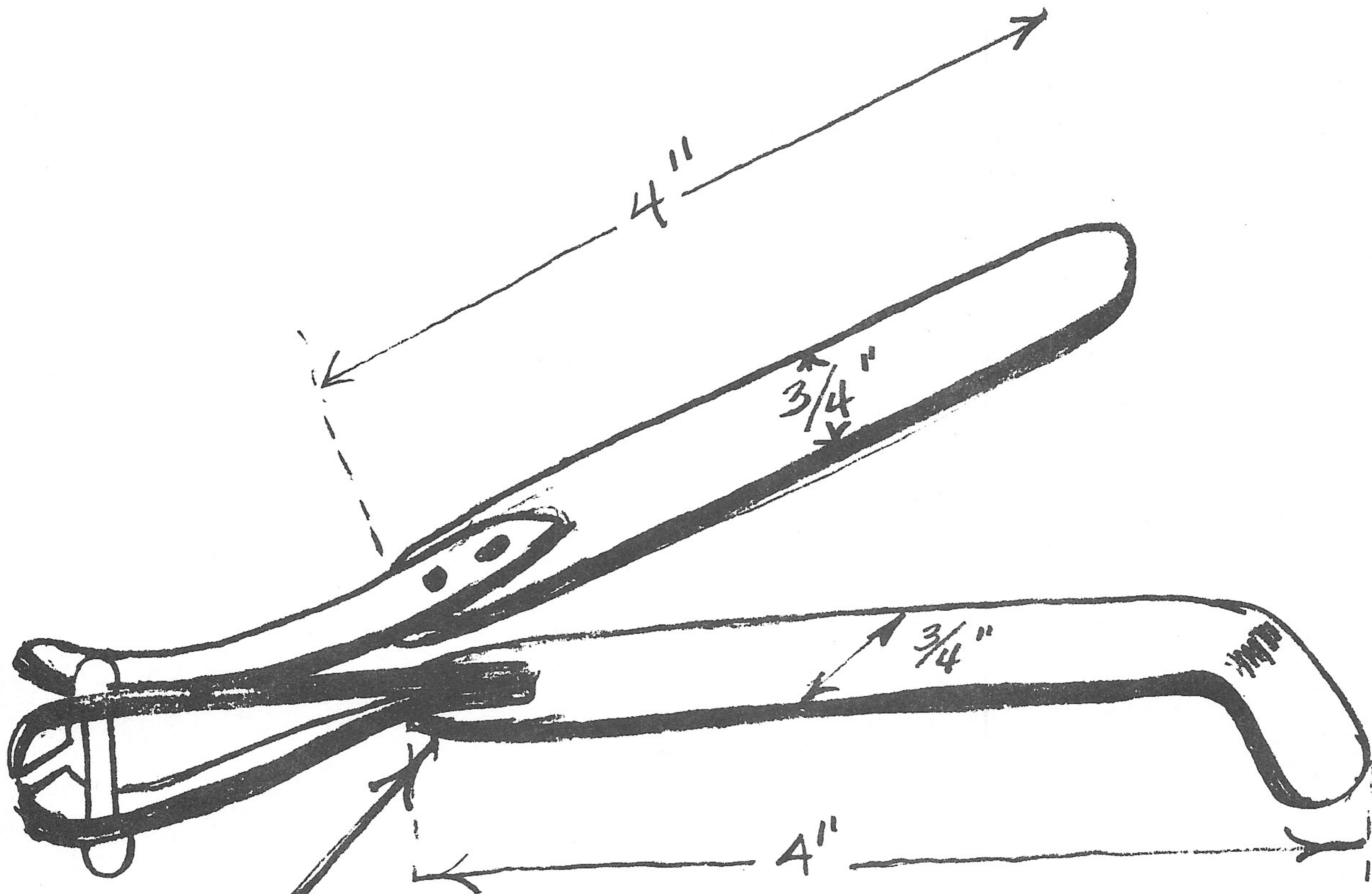
MAKE NEW ENLARGED
HANDLE OUT OF HARDWOOD AND
INSTALL BLADE IN HANDLE.

HOT COOKING OIL MAKES A GOOD
FINISH FOR HANDLE.

ZIPPER PULL



EXTENDED HANDLE NAIL CLIPPERS



SPOT WELD METAL STRIPS TO NAIL CLIPPERS FOR ADDED LEVERAGE

